

TYPE	DATE	TIME	AGENCY	DESCRIPTION	PAGE
Area Forecast Discussion	2/16/2018	0304	PST	San Diego	60
Area Forecast Discussion	2/16/2018	1225	PST	San Diego	63
Area Forecast Discussion	2/17/2018	0302	PST	San Diego	65
Area Forecast Discussion	2/17/2018	0333	MST	Phoenix	67
Area Forecast Discussion	2/17/2018	1320	PST	San Diego	70

TYPE	DATE	TIME	AGENCY	DESCRIPTION	PAGE
Area Forecast Discussion	2/17/2018	1355	MST	Phoenix	72
				All models continue to indicate that a well defined deep trough will drop southward into northern Arizona Monday and Tuesday.... <b>In addition Sunday evening, robust height falls surging into SE California will promote stronger winds and at least a localized blowing dust threat.</b>	
Urgent Weather Message	2/17/2018	1732	PST	San Diego	75
				...Apple and Lucerne Valleys- <b>Coachella Valley-San Diego County Deserts</b> -San Geronimo Pass Near Banning-Including the cities of Victorville, Hesperia, Apple Valley, <b>Indio, Palm Springs, Cathedral City, Palm Desert</b> , Palm Desert Country, La Quinta, <b>Coachella, Borrego Springs</b> , Banning, and Desert Hot Springs... <b>WIND ADVISORY IN EFFECT FROM 2 PM SUNDAY TO 6 PM PST MONDAY</b> ...The National Weather Service in San Diego has issued a Wind Advisory...which is in effect from 2 PM Sunday to 6 PM PST Monday. * <b>Winds</b> ... <b>Strong west winds with occasional gusts up to 55 mph. Strongest winds immediately below mountain passes and along the foothills.</b> * <b>Timing</b> ...Winds becoming gusty Sunday afternoon with the strongest winds Sunday night through Monday. * <b>Impacts</b> ...Strong winds will make travel difficult for high-profile vehicles. Blowing dust and sand may reduce visibility to near-zero in a few locations.	
Area Forecast Discussion	2/17/2018	2130	PST	San Diego	76
				<b>...Winter Weather Advisory and Wind Advisory headlines were added to the forecast for the upcoming cold winter storm....</b>	
Urgent Weather Message	2/18/2018	0245	MST	Phoenix	79
				..... <b>Imperial County Southwest-Imperial County West</b> -Including the cities of Mountain Spring, Coolidge Springs, Salton City, Winona, Coyote Wells, Ocotillo, and Plaster City... <b>WIND ADVISORY IN EFFECT FROM 2 PM THIS AFTERNOON TO 8 PM PST MONDAY</b> ...The National Weather Service in Phoenix has issued a Wind Advisory, which is in effect from 2 PM this afternoon to 8 PM PST Monday. * <b>AFFECTED AREA</b> ...Southwest Imperial County including Interstate 8 * <b>TIMING</b> ...Sunday afternoon through Monday evening * <b>WINDS</b> ...West winds 30 to 40 mph with gusts up to 55 mph * <b>IMPACTS</b> ...Strong winds in far southwestern Imperial County will create difficult and hazardous driving conditions, especially for high profile vehicles. <b>Areas of blowing dusts</b> may also lead to sharply reduced visibilities.	
Urgent Weather Message	2/18/2018	0245	MST	Phoenix	80
				...Salton Sea-Chuckwalla Mountains- <b>Imperial County Southeast-Imperial Valley</b> -Chiriaco Summit-Including the cities of Desert Shores, Imperial Hot Mineral Springs, Winterhaven, El Centro, Calexico, Alamo, Brawley, and Chiriaco Summit... <b>WIND ADVISORY IN EFFECT FROM 11 AM TO 8 PM PST MONDAY</b> ...The National Weather Service in Phoenix has issued a Wind Advisory, which is in effect from 11 AM to 8 PM PST Monday. * <b>AFFECTED AREA</b> ...Imperial County including the city of El Centro. * <b>TIMING</b> ...Late Monday morning through Monday evening * <b>WINDS</b> ...West winds 20-30 mph with gusts up to 40 mph * <b>IMPACTS</b> ...Windy conditions over Imperial County will create difficult and hazardous driving conditions, especially for high profile vehicles. <b>Areas of blowing dusts</b> may also lead to sharply reduced visibilities.	

TYPE	DATE	TIME	AGENCY	DESCRIPTION	PAGE
Area Forecast Discussion	2/18/2018	0340	MST	Phoenix	82
Area Forecast Discussion	2/18/2018	0424	MST	Phoenix	85
Urgent Weather Message	2/18/2018	0447	PST	San Diego	88
Area Forecast Discussion	2/18/2018	0449	MST	Phoenix	93

TYPE	DATE	TIME	AGENCY	DESCRIPTION	PAGE
Area Forecast Discussion	2/18/2018	0517	PST	San Diego	96
<p><b>A cold low pressure system centered along the coast of southern British Columbia early this morning will move southward through the western states through Monday. Onshore flow will strengthen today with the strongest onshore flow expected for tonight and Monday.</b></p> <p>Coastal...valley...and mountain areas will be around 10 degrees cooler today than Saturday. <b>Winds will strengthen for the mountains and deserts today with the strongest winds for this afternoon into Monday. Stronger winds will develop over the coastal waters late tonight and spread into coastal and valley areas of San Diego County on Monday. ... This low pressure system will bring scattered mainly light showers along and west of the mountains with the greatest coverage for late tonight through early Monday.</b> Rainfall is expected to range from one tenth inch or less at the coast to one quarter to one third inch in the mountains with locally greater amounts. The snow level will lower from around 6000 feet late today to 3000 to 3500 feet for Monday through Monday evening with a few inches of snowfall possible above 4000 feet....</p>					
Area Forecast Discussion	2/18/2018	0850	PST	San Diego	99
<p><b>...Surface pressure gradients were accelerating onshore at 8 MBS KSAN to SW NV, and 3 MBS to the lower deserts. This was supporting westerly wind gusts 35-45 MPH through wind-prone mtn areas. the 12Z</b></p> <p>Miramar sounding had a sfc-based inversion, with a weaker inversion near 7K FT MSL. Dewpoints surged in this layer boosting the overall PW to 0.48 inch...</p>					
Area Forecast Discussion	2/18/2018	0855	MST	Phoenix	102
<p>...Modest heights falls were already spreading into the region this morning ahead of a deep trough digging towards the Great Basin....<b>Otherwise, conditions still look favorable for some mountain rotors to descend into western Imperial County tonight, and will continue the wind advisory as is.</b></p>					
Urgent Weather Message	2/18/2018	1248	PST	San Diego	105
<p><b>.....AREAS OF STRONG GUSTY WINDS FOR THIS AFTERNOON THROUGH MONDAY... ..AREAS OF NEAR FREEZING TEMPERATURES WITH AREAS OF FROST FOR MONDAY NIGHT AND TUESDAY NIGHT IN THE VALLEYS... .A cold low pressure system from the north will bring periods of strong and gusty westerly winds through Monday.</b> As the storm moves east, cold nights will follow, with areas of frost and freezing conditions for portions of the valleys and through the San Geronio Pass....<b>Coachella Valley-San Diego County Deserts-Including the cities of Indio, Palm Springs, Cathedral City, Palm Desert, Palm Desert Country, La Quinta, Coachella, and Borrego Springs...WIND ADVISORY REMAINS IN EFFECT UNTIL 6 PM PST MONDAY...</b></p> <p>* <b>Winds</b>...Areas of northwest to west winds 25 to 35 mph with gusts to 55 mph and isolated gusts to 60 to 70 mph.</p> <p>* <b>Location</b>...Strongest gusts near the mountains...and in the Coachella Valley north and east of Interstate 10.</p> <p>* <b>Impacts</b>...Strong winds will make travel difficult for high- profile vehicles. Blowing dust and sand may reduce visibility to near zero in a few locations.</p>					

TYPE	DATE	TIME	AGENCY	DESCRIPTION	PAGE
Area Forecast Discussion	2/18/2018	1350	PST	San Diego	109
				<p>...A rapid acceleration is the surface pressure gradient to 14 MBS KSAN to SW NV portends the strong winds to come overnight. But as of Noon PST...Peak wind gusts over 50 MPH were confined to the San Geronio Pass, and Volcan Mtn in San Diego County. The sfc gradient will maximize this evening and increasing winds aloft overnight will combine to create the strongest gust potential, first over northern areas of the CWA, then south across San Diego County. A secondary wind max is likely on the highest elevations of the San Diego County Mts on Monday as the powerful upper level jet core traverses the area. A few peak gusts of around 70 MPH may be observed in these areas. A longwave trough will dive into the Great Basin on Monday, grazing SoCal with strong onshore winds and scattered light precipitation. It will also bring the coldest air of the season, plunging maximum temps on Monday into the 15 to 20 degrees below normal range. given the extended period of well above normal temps this winter, it will be a profound change.</p>	
Urgent Weather Message	2/18/2018	1406/ 1306	MST /PST	Phoenix	112
				<p>.....Imperial County Southwest-Imperial County West-Including the cities of Mountain Spring, Coolidge Springs, Salton City, Winona, Coyote Wells, Ocotillo, and Plaster City...<b>WIND ADVISORY REMAINS IN EFFECT UNTIL 8 PM PST MONDAY...</b></p> <p>* <b>AFFECTED AREA...</b>Southwest Imperial County including Interstate 8</p> <p>* <b>TIMING...</b>This afternoon through Monday evening</p> <p>* <b>WINDS...</b>West winds 30 to 40 mph with gusts up to 55 mph</p> <p>* <b>IMPACTS...</b>Strong winds in far southwestern Imperial County will create difficult and hazardous driving conditions, especially for high profile vehicles. <b>Areas of blowing dusts</b> may also lead to sharply reduced visibilities.</p>	
Urgent Weather Message	2/18/2018	1406/ 1306	MST /PST	Phoenix	113
				<p>...Salton Sea-Chuckwalla Mountains-<b>Imperial County Southeast-Imperial Valley</b>-Chiriaco Summit-Including the cities of Desert Shores, Imperial Hot Mineral Springs, Winterhaven, El Centro, Calexico, Alamo, Brawley, and Chiriaco Summit...<b>WIND ADVISORY REMAINS IN EFFECT FROM 11 AM TO 8 PM PST MONDAY..</b></p> <p>* <b>AFFECTED AREA...</b>Imperial County including the city of El Centro.</p> <p>* <b>TIMING...</b>Late Monday morning through Monday evening</p> <p>* <b>WINDS...</b>West winds 20-30 mph with gusts up to 40 mph</p> <p>* <b>IMPACTS...</b>Windy conditions over Imperial County will create difficult and hazardous driving conditions, especially for high profile vehicles. <b>Areas of blowing dusts</b> may also lead to sharply reduced visibilities.</p>	
Area Forecast Discussion	2/18/2018	1410	MST	Phoenix	114
				<p>Modest heights falls have spread into the region this afternoon ahead of a deep PV anomaly digging towards the Great Basin. ...<b>The larger impact over the next 36 hours may be gusty winds producing blowing dust and difficult driving conditions - especially through SE California.</b> Strong southwest flow over the San Diego mountains along with approaching robust height falls should promote mountain rotors into the far western portions of Imperial County.</p>	
Area Forecast Discussion	2/18/2018	1938	MST	Phoenix	117
				<p><b>UPDATE...Updated Aviation Discussion....</b>Southeast California/Southwest Arizona including KIPL and KBLH: <b>Expect some breezy to very breezy conditions tonight with westerly winds gusting to 18-24kt. By Monday morning windy conditions will predominate with strong wind gusts of 25-35kt.</b> Some areas of blowing dust can not be ruled out for Monday but will hold off mentioning any reduced visibilities and dust in the TAFs.</p>	

TYPE	DATE	TIME	AGENCY	DESCRIPTION	PAGE
Area Forecast Discussion	2/18/2018	2145	PST	San Diego	121
Urgent Weather Message	2/18/2018	2157	PST	San Diego	124
Area Forecast Discussion	2/19/2018	0307	PST	Phoenix	128
Urgent Weather Message	2/19/2018	0308	PST	San Diego	131

TYPE	DATE	TIME	AGENCY	DESCRIPTION	PAGE
Urgent Weather Message	2/19/2018	0323	MST	Phoenix	136
Urgent Weather Message	2/19/2018	0323	MST	Phoenix	137
Area Forecast Discussion	2/19/2018	0400	PST	San Diego	139
Area Forecast Discussion	2/19/2018	0531	MST	Phoenix	142
Urgent Weather Message	2/19/2018	0616	MST	Phoenix	145



TYPE	DATE	TIME	AGENCY	DESCRIPTION	PAGE
Urgent Weather Message	2/19/2018	0616	MST	Phoenix	145
Urgent Weather Message	2/19/2018	0619	MST	Phoenix	148
Area Forecast Discussion	2/19/2018	0827	PST	San Diego	151
Area Forecast Discussion	2/19/2018	0840	MST	Phoenix	154
Urgent Weather Message	2/19/2018	0857/ 0757	MST /PST	Phoenix	158



TYPE	DATE	TIME	AGENCY	DESCRIPTION	PAGE
Urgent Weather Message	2/19/2018	0857/ 0757	MST /PST	Phoenix	160
				<p>....Salton Sea-Imperial County Southeast-Imperial Valley-Including the cities of Desert Shores, Winterhaven, El Centro, Calexico, Alamo, and Brawley.....<b>WIND ADVISORY IN EFFECT UNTIL 10 AM PST THIS MORNING</b>...The National Weather Service in Phoenix has issued a Wind Advisory, which is in effect until 10 AM PST this morning.</p> <p>* <b>AFFECTED AREA</b>...Imperial County including Interstate 8, El Centro and the Imperial Valley.</p> <p>* <b>TIMING</b>...Now through late this morning.</p> <p>* <b>WINDS</b>...West winds 25 to 35 mph with gusts up to 40 mph.</p> <p>* <b>IMPACTS</b>...Strong winds in Imperial County will create difficult and hazardous driving conditions, especially for high profile vehicles. <b>Areas of blowing dust</b> may also lead to sharply reduced visibilities.</p>	
Area Forecast Discussion	2/19/2018	1012	MST	Phoenix	164
				<p>...<b>UPDATE...Updated aviation discussion</b>...Southeast California/Southwest Arizona including KIPL and KBLH: <b>Main aviation weather impact will be the windy conditions and blowing dust</b>. Winds will be out of the northwest with gusts up to 30 to 40 kts, particularly at KIPL. These gusty winds will result in areas of blowing dust and associated reductions in visibility through late this evening. Thereafter winds will subside. Outside of any dust, skies will be clear.</p>	
Urgent Weather Message	2/19/2018	1057/ 0957	MST /PST	Phoenix	168
				<p>Imperial County Southwest-Imperial County West-Including the cities of Mountain Spring, Coolidge Springs, Salton City, Winona, Coyote Wells, Ocotillo, and Plaster City...<b>WIND ADVISORY REMAINS IN EFFECT UNTIL 8 PM PST THIS EVENING</b>...</p> <p>* <b>AFFECTED AREA</b>...Southwest Imperial County including Interstate 8.</p> <p>* <b>TIMING</b>...Now through this evening.</p> <p>* <b>WINDS</b>...West winds 30 to 40 mph with gusts up to 50 mph.</p> <p>* <b>IMPACTS</b>...Strong winds in far southwestern Imperial County will create difficult and hazardous driving conditions, especially for high profile vehicles. Areas of blowing dust may also lead to sharply reduced visibilities.</p>	
Urgent Weather Message	2/19/2018	1057/ 0957	MST /PST	Phoenix	168
				<p>....Salton Sea-Imperial County Southeast-Imperial Valley-Including the cities of Desert Shores, Winterhaven, El Centro, Calexico, Alamo, and Brawley.....<b>WIND ADVISORY IN EFFECT UNTIL 10 AM PST THIS MORNING</b>...The National Weather Service in Phoenix has issued a Wind Advisory, which is in effect until 10 AM PST this morning.</p> <p>* <b>AFFECTED AREA</b>...Imperial County including Interstate 8, El Centro and the Imperial Valley.</p> <p>* <b>TIMING</b>...Now through late this morning.</p> <p>* <b>WINDS</b>...West winds 25 to 35 mph with gusts up to 40 mph.</p> <p>* <b>IMPACTS</b>...Strong winds in Imperial County will create difficult and hazardous driving conditions, especially for high profile vehicles. <b>Areas of blowing dust</b> may also lead to sharply reduced visibilities.</p>	
Urgent Weather Message	2/19/2018	1232	PST	San Diego	174
				<p>...<b>Continued breezy to windy this evening, then winds decreasing late tonight</b>. With clear skies and light winds, temperatures will drop rapidly in wind-sheltered areas. Areas of frost are expected along with freezing conditions in portions of the Inland Empire.....<b>Coachella Valley-San Diego County Deserts-Including the cities of Indio, Palm Springs, Cathedral City, Palm Desert, Palm Desert Country, La Quinta, Coachella, and Borrego Springs</b>...<b>WIND ADVISORY REMAINS IN EFFECT UNTIL 6 PM PST THIS EVENING</b>...</p> <p>* <b>Winds</b>...Areas of northwest to west winds 25 to 35 mph with isolated gusts to 50 mph.</p> <p>* <b>Location</b>...Strongest gusts near the mountains...and in the Coachella Valley north and east of Interstate 10.</p> <p>* <b>Impacts</b>...Strong winds will make travel difficult for high-profile vehicles. <b>Blowing dust</b> and sand may reduce visibility to near zero in a few locations.</p>	

TYPE	DATE	TIME	AGENCY	DESCRIPTION	PAGE
Urgent Weather Message	2/19/2018	1324/ 1224	MST /PST	Phoenix	178
Urgent Weather Message	2/19/2018	1324/ 1224	MST /PST	Phoenix	180
Area Forecast Discussion	2/19/2018	1328	PST	San Diego	182
Urgent Weather Message	2/19/2018	1402/ 1302	MST /PST	Phoenix	185
Urgent Weather Message	2/19/2018	1402/ 1302	MST /PST	Phoenix	186

TYPE	DATE	TIME	AGENCY	DESCRIPTION	PAGE
Area Forecast Discussion	2/19/2018	1410	MST	Phoenix	189
Urgent Weather Message	2/19/2018	1610/ 1510	MST /PST	Phoenix	192
Southwestern California Temperature and Precipitation Summary	2/19/2018	1630	PST	San Diego	195
Urgent Weather Message	2/19/2019	1700	MST	Phoenix	198
Public Information Statement	2/19/2018	1710	PST	San Diego	200
Urgent Weather Message	2/19/2018	1729	PST	San Diego	204

TYPE	DATE	TIME	AGENCY	DESCRIPTION	PAGE	
Southwestern California Temperature and Precipitation Summary	2/19/2018	1730	PST	San Diego	...MOUNTAIN AREAS...PLRC1: PALOMAR MOUNTAIN 5550 : 35 / 27 / <b>0.05</b> / ;JULC1: JULIAN 4240 : 40 / 32 / <b>0.14</b> / MLNC1: MOUNT LAGUNA 5920 : 34 / 28 / <b>0.03</b> / 0 CPMC1: CAMPO COOP 2615 : 50 / 40 / <b>0.02</b> / ...DESERT AREAS...TRM : THERMAL -117 : 68 / 59 / <b>T</b> /	207
Area Forecast Discussion	2/19/2018	1739	MST	Phoenix	<b>.UPDATE...Updated Aviation section...</b> Southeast California/Southwest Arizona including KIPL and KBLH: <b>West and northwest winds will continue to weaken this evening with only some isolated/scattered cumulus (mainly near the higher mountains).</b> Lofted dust will cause reduced slantwise visibilities (especially over Yuma and Imperial Counties) into the early evening before slowly improving (lingering for several hours though).	210
Area Forecast Discussion	2/19/2018	1741	PST	San Diego	<b>...At 5 PM winds remained gusty over the region and the Wind Advisory for the lower deserts has been extended through 10 PM this evening. A few light rain/snow showers were impacting the region still, resulting in chain controls in the San Bernardino County Mtns. Showers should remain possible through midnight, with minimal accumulation....</b>	213
Area Forecast Discussion	2/19/2018	2115	MST	Phoenix	<b>.UPDATE...Updated Discussion and Aviation sections...</b> Southeast California/Southwest Arizona including KIPL and KBLH: <b>West and northwest winds will linger overnight and dip below 10 kts by 07Z (stronger over Imperial County).</b> Isolated to scattered clouds AOA FL090 (locally BKN over higher terrain) will dissipate by 12Z. Winds in the lowest 10 kft will favor northwest and north directions overnight and through the day Tuesday. Anticipate lofted dust to continue slowly dissipating.	216
Area Forecast Discussion	2/19/2018	2118	PST	San Diego	<b>...At 930 PM...The axis of the deep trough over the Western U.S. had pushed east of SoCal, resulting in northwest flow and subsidence that were bringing drier air clearing skies to the region. Winds were weakening rapidly at the surface, with stronger gusts limited to the desert slopes.</b> Accordingly, temperatures were cooling quickly with some parts of the eastern San Diego County valleys and Inland Empire already seeing temperatures in the upper 30s and low 40s....	220
Urgent Weather Message	2/19/2018	2157	PST	San Diego	Coachella Valley-San Diego County Deserts- <b>...WIND ADVISORY IS CANCELLED...</b> The National Weather Service in San Diego has cancelled the Wind Advisory. Winds have weakened in the area and are expected to remain on a weakening trend overnight.	222
Area Forecast Discussion	2/20/2018	0240	PST	San Diego	<b>...A longwave trough of low pressure will remain centered over the western states with shortwaves moving quickly southward along the western side of the trough near the West Coast. Relatively slight differences in the track...timing...and intensity of these systems will have noticeable impacts on the weather that is ultimately experienced across Southern California. Tracks slightly farther west would keep most of the precipitation off the coast while tracks a little farther east would have greater potential to spread precipitation inland to around the mountains. In any event...precipitation amounts should be mostly light with coverage fairly limited. Snow levels will continue to be fairly low... around 3500 feet. One of these shortwaves could bring some additional mostly light precipitation around Wednesday into Wednesday night and another around late Thursday into early Friday.</b>	225

TYPE	DATE	TIME	AGENCY	DESCRIPTION	PAGE
Area Forecast Discussion	2/20/2018	0325	MST	Phoenix ...Latest water vapor imagery and streamline analysis suggest that the broad trough axis to our west has slowed....Models remain in good agreement and indicate the aforementioned trough will weaken as it lifts to the northeast today.	227

☐

375

FXUS66 KSGX 161104

AFDSGX

Area Forecast Discussion

National Weather Service San Diego CA

304 AM PST Fri Feb 16 2018

.SYNOPSIS...

Dry and warmer through Saturday with gusty Santa Ana winds near the coastal foothills and below passes and canyons into this morning. For Sunday and Monday...a cold low pressure system moving southward through the western states will bring stronger onshore flow with cooling...gusty west winds in the mountains and deserts...and chances for mostly light precipitation along and west of the mountains for late Sunday into Monday evening. Drier and continued cool for Tuesday through Thursday.

&&

.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE...  
SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO  
COUNTIES...

High pressure aloft over the eastern Pacific will extend into California into Saturday. This will bring dry weather with a warming trend into Saturday. Surface high pressure over the Great Basin will bring weak to locally moderate offshore flow into this morning with gusty northeast winds near the coastal foothills and below passes and canyons into this morning. Strongest gusts overnight have mostly been 45 mph or less with an isolated gust to 60 mph at Sill Hill in the San Diego County mountains. The strongest gusts overnight have been across the coastal mountain slopes of the San Diego County mountains into the inland valleys.

The offshore flow will push the warmest high temperatures today for inland coastal and western valley areas with warmest high temperatures west of the mountains on Saturday in the valleys.

For Sunday and Monday...a cold low pressure system moving southward through the western states will bring stronger onshore flow to Southern California. This will bring a cooling trend. The marine layer will return Saturday night and deepen into Sunday morning with coastal stratus spreading inland into portions of the inland valleys.

The onshore flow will also bring a chance of mostly light showers

along and west of the mountains for late Sunday into Monday evening with rainfall of less than one tenth inch near the coast to around one quarter inch on the coastal mountain slopes with locally greater amounts. Snow levels near 6000 feet late Sunday...will lower to 4000 to 4500 feet for late Sunday night through Monday.

Drier with below average high temperatures for Tuesday through Thursday.

&&

.AVIATION...

161000Z...East to northeast wind gusts of 20-30 kt will continue along coastal mountain slopes and through mountain passes overnight. LLWS and areas of moderate-strong up/downdrafts are expected, but will decrease this morning. Otherwise, SCT high clouds across the region through the period.

&&

.MARINE...

A low pressure trough moving across the region may create west to northwest wind gusts of 20-30 kt and combined seas of 9-11 ft Monday into early Tuesday. Conditions will likely be hazardous to small craft during the period. Otherwise, no other hazardous marine weather expected through the middle of next week.

&&

.FIRE WEATHER...

Weak to locally moderate offshore flow will continue through this morning bringing drying near the coastal foothills and northeast to east wind gusts of 35 mph and locally 45 mph to the mountain passes and coastal foothills resulting in elevated fire weather conditions. The strongest winds will be through mid morning with humidities of 15 to 20 percent early this morning...falling to around 10 percent for this afternoon. Weak onshore flow will return on Saturday afternoon and strengthen for Sunday and Monday bringing cooling. Deepening of marine layer bring a rapid recovery of inland humidities for Sunday.

&&

.SKYWARN...

Skywarn activation is not requested. However weather spotters are encouraged to report significant weather conditions.

&&



.SGX WATCHES/WARNINGS/ADVISORIES...  
CA...NONE.  
PZ...NONE.

&&

\$\$

PUBLIC/FIRE WEATHER...17  
AVIATION/MARINE...JJT

# IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

## Department of Agronomy

716 Farm House Ln

Ames, IA 50011

akrherz@iastate.edu

515-294-5978 phone



Facebook



Twitter



Github



YouTube



RSS

☐

974

FXUS66 KSGX 162027

AFDSGX

Area Forecast Discussion

National Weather Service San Diego CA

1225 PM PST Fri Feb 16 2018

.SYNOPSIS...

Dry, offshore flow will prevail through Saturday morning, continuing the fair and mild weather. Winds will turn back onshore and become strong and gusty across the mountains and deserts by late Sunday through early Monday, bringing much cooler weather and a chance for some light rain and snow showers along and west of the mountains as the marine layer deepens. Winds turn back offshore on Tuesday returning dry conditions, but continued cool weather.

&&

.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE...  
SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO  
COUNTIES...

There were still some high clouds moving across the CWA at Noon PST, but were thinning from the west. Offshore sfc pressure gradients were weakening from the deserts. Most peak wind gusts at Noon were under 25 MPH.

It should be a pleasant and mild again on Saturday under mostly sunny skies with weaker offshore winds in the morning.

Surface high pressure over the Great Basin today will weaken through Saturday, allowing our offshore flow pattern to turn back onshore over the weekend. On Sunday, a cold, low pressure trough will slip south into the PacNW, and then slide across the Great Basin on Monday. as it does, surface low pressure will intensify near the Four Corners, accelerating our flow onshore. This will rapidly build the marine layer Sunday night, and likely set off scattered shower activity along and west of the mts. Although light, the strong upslope will favor the coastal slopes for rain amounts.

Westerly winds could be quite strong over the ridgetops and along the desert slopes, depending on the track of the upper-level trough and developing sfc low. A High Wind Watch may be needed for the desert slope and foothill areas from Sunday evening through Monday. There is still a large difference in 500 MB heights/thickness over the SW between the 12Z GFS/ECMWF runs. This conflict makes temp

forecasts and even the wind forecasts at this time less certain than normal. Hopefully we will see more consistent results in subsequent model runs.

Even after the main trough slides east on Tue, weak troughing hangs back over the West through mid next week. This will keep daytime temps a bit below average.

&&

.AVIATION...

162030Z...SCT AOA 20000 ft MSL will become SKC after 03Z Saturday, otherwise light winds and unrestricted visibility are anticipated through 06Z Sunday.

&&

.MARINE...

Quiet weather will continue over the coastal waters through the weekend. A frontal passage early next week will bring building swell and gusty west northwest winds on Monday and Tuesday. Winds gusts to 30 kts and seas of 7-11 ft (9-11 sec period) are possible during this period. Conditions will improve Wednesday and beyond.

&&

.FIRE WEATHER...

Local elevated fire weather conditions into Saturday. Northeast to east winds along the coastal slopes and foothill areas will be weaker through Saturday with peak gusts 25 MPH or less. RH values will continue to run low (10-20%) through Saturday afternoon with some recovery overnight. Weak onshore flow will develop this afternoon west of the mts, then turn back weakly offshore tonight into Saturday morning. Stronger onshore flow will return on Sunday and Monday, bringing cooling and much higher RH as the marine layer deepens up onto the coastal slopes.

&&

.SKYWARN...

Skywarn activation is not requested. However weather spotters are encouraged to report significant weather conditions.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...NONE.

PZ...NONE.

┌  
387  
FXUS66 KSGX 171102  
AFDSGX

Area Forecast Discussion  
National Weather Service San Diego CA  
302 AM PST Sat Feb 17 2018

.SYNOPSIS...

Warm and dry weather will continue today. A return and strengthening of onshore flow tonight will bring a return of coastal low clouds and fog...spreading into portions of the inland valleys for Sunday morning. For Sunday and Monday...a cold low pressure system from the north will bring stronger onshore flow with cooling, strong and gusty west winds in the mountains and deserts, and a chance of light precipitation along and west of the mountains beginning late Sunday and continuing into Monday evening. Drier with slow warming for Tuesday through Thursday. Another low pressure system from the north could bring another chance for mainly light precipitation around Friday.

&&

.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE...  
SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO  
COUNTIES...

.SHORT TERM (Today through Monday)...

Warm dry weather will continue today with above average high temperatures. Weak offshore flow this morning will become weakly onshore this afternoon and much stronger onshore for Sunday into Monday as a cold low pressure system moves southward along the West Coast. Patchy stratus may return near the beaches this afternoon. Coastal stratus will become more widespread tonight and spread into portions of the inland valleys Sunday morning as the marine layer deepens.

Cooling will begin to spread inland on Sunday with significantly cooler weather expected for Monday with high temperatures 15 to 20 degrees cooler than those of today. With the stronger onshore flow...there is a chance of mainly light showers along and west of the mountains from late Sunday afternoon into Monday evening with rainfall of less than one tenth inch near the coast to around one quarter inch on the coastal mountain slopes, with isolated greater amounts. Snow levels near 6000 feet Sunday will lower to 4000 to 4500 feet Sunday night...and to 3500 to 4000 feet for late Monday through Monday evening.

&&

.LONG TERM (Tuesday through Friday)...

High pressure will remain over the eastern Pacific along 155W and off the southeastern coast of the United States with a longwave

**February 19, 2018 Exceptional Event, Imperial County****Appendix A**

trough over the western states. The global models are showing less agreement in the handling of shortwaves moving through Alaska... then moving southward along the West Coast on the western side of the longwave western trough. This should maintain cooler than average temperatures for Southern California. As those shortwaves move southward along the West Coast...they will reinforcement the cooler than average temperatures and bring additional chances for mostly light precipitation.

&&

.AVIATION...

171030Z...SKC and P6SM VIS through this evening. Low clouds and fog will develop along the coast tonight, with bases around 500 feet MSL and areas of VIS below 1 mile. KCRQ has the best chance of fog by early Sunday morning.

&&

.MARINE...

No hazardous weather is expected through Sunday. A disturbance moving across the region will create west-northwest wind gusts to 30 kt and combined seas of 7-11 ft (9-11 sec period) early Monday through early Tuesday. A Small Craft Advisory may be needed through the period. Conditions will improve by Tuesday afternoon.

&&

.SKYWARN...

Skywarn activation is not requested. However weather spotters are encouraged to report significant weather conditions.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...NONE.

PZ...NONE.

&&

\$\$

PUBLIC...17

AVIATION/MARINE...JJT

**IOWA STATE  
UNIVERSITY**

College of Ag

2

285

FXUS65 KPSR 171033

AFDPSR

Area Forecast Discussion

National Weather Service Phoenix AZ

333 AM MST Sat Feb 17 2018

.SYNOPSIS...

Near normal temperatures are expected this weekend before a low pressure system dropping southward through the southern Rockies brings cooler air to the Desert Southwest early next week. There will also be a chance of showers beginning Sunday night and continuing through early Tuesday across the higher terrain north and east of Phoenix. In the wake of the low pressure system, cooler than normal temperatures will persist into next weekend.

&&

.DISCUSSION...

Latest water vapor imagery and streamline analysis indicate that the trough axis has generally moved east of the forecast area. However, abundant low-level moisture remains in its wake, with dewpoints in the upper 40s and lower 50s. GOES-16 reveals developing areas of low clouds and fog, mainly south and east of Phoenix. Afternoon crossover temperatures do not support much potential for significant reductions in visibility. Nevertheless, there is the possibility of isolated dense fog this morning from Pinal County south and eastward towards Tucson.

Height rises along with increasing subsidence will yield a warming and drying trend today. However, some low-level moisture will linger and forecast temperatures were lowered a degree or two below the National Blend. Meanwhile, a weak upper low west of the Baja Peninsula will spread high clouds across portions of the Desert Southwest today.

Latest models continue to indicate that a well-defined broad trough will drop southward into northern Arizona Monday. Ahead of this system, vorticity and jet-forced ascent will be on the increase. The cyclonic flow ahead of the trough along with the approaching remnants of the Baja low pressure system will again result in sufficient low-level moisture transport, particularly into central Arizona. Upslope component to the mean flow will generate areas of light rainfall, particularly across the higher terrain from Phoenix north and eastward as early as Sunday evening.

Conditions will remain favorable for additional light precipitation north and east of Phoenix Monday. Latest hi-res WRFs also indicate that the anomalously strong wind fields will translate into breezy conditions at the surface. Although high temperatures in the mid 60s are anticipated, the winds combined with the clouds will make it feel considerably cooler. Behind the trough Tuesday, temperatures will struggle to reach the 60 degree mark in the Phoenix area. Across the higher terrain, snow levels will be low enough for a dusting of snow across the highest peaks. Although the probability of a freeze event becomes increasingly unlikely through February, there is a slight that isolated lower desert locations will drop into the lower 30s Wednesday morning.

Latest extended guidance indicates that a longwave trough will persist across the Intermountain West through next weekend. This will generally result in cooler than normal conditions along with the passage of a few short wave troughs. However, both the GEFS and EPS show little potential for significant precipitation.

&&

.AVIATION...

South-Central Arizona including KPHX, KIWA, and SDL:

Left-over moisture in the lower/mid-levels of the atmosphere will continue to produce SCT-BKN cigs in the 4-7k foot range through at least the morning hours on Saturday, as light winds aloft will be slow to bring drier air into the region from the west. Cigs should finally drop into the FEW-SCT range on Sat afternoon and into the FEW-CLR range by evening. WInds to remain quite light (mainly aob 5 kts), mainly following the usual diurnal trends.

Southeast California/Southwest Arizona including KIPL and KBLH:

Light winds and mainly clear skies expected through the taf period.

Aviation Discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Sunday through Thursday: A weak weather system will bring a chance of showers Sunday and Monday over orographically favored areas of Gila County while the lower deserts will generally remain dry. Whatever does fall won't likely amount to much as totals are forecast to be below a tenth of an inch. Winds will be breezy on both Sunday and Monday while minimum humidity hovers around 20% for the lower deserts and between 30-50% for the higher terrain.



Light winds are forecast Tuesday through Thursday as all areas stay dry. During this period, temperatures will be around 5 degrees below seasonal normals while afternoon humidity levels remain between 20-30%.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...None.

&&

\$\$

Visit us on Facebook, Twitter, and at [weather.gov/phoenix](http://weather.gov/phoenix)

DISCUSSION...Hirsch

AVIATION...Percha

FIRE WEATHER...Wilson

# IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

## Department of Agronomy

716 Farm House Ln

Ames, IA 50011

[akrherz@iastate.edu](mailto:akrherz@iastate.edu)

515-294-5978 phone



Facebook

□

597

FXUS66 KSGX 172120

AFDSGX

## Area Forecast Discussion

National Weather Service San Diego CA

120 PM PST Sat Feb 17 2018

## .SYNOPSIS...

Increasing onshore flow will bring marine clouds and possible fog to coastal areas overnight, then noticeably cooler weather on Sunday. A cold low pressure system will be moving into the Great Basin Sunday and Monday. Strong westerly winds will develop over the mountains and deserts, and some light rain and snow showers may break out, creating wintry conditions over the mountains Sunday night through Monday night. Dry and a little warmer midweek, then cooler again next weekend with another chance for light precipitation as another cold trough moves south along the Coast.

&amp;&amp;

.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE...  
SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO  
COUNTIES...

Skies were sunny midday across SoCal, with scattered high clouds drifting NE. The sfc pressure gradient had relaxed from SW NV-KSAN and was about neutral. Winds were generally light with a few wind-prone areas still reporting easterly gusts at Noon over 20 MPH. Surface dewpoints were still in the teens and 20s F, even some coastal stations.

Our string of exceptional winter weather is about to come to an end as the atmosphere undergoes an adjustment favoring troughing over the West. Monday could be the coolest day over a good chunk of the CWA since last winter. A large, cold, low pressure trough will drop into the Great Basin through Monday. It will drop sfc pressure over the interior west, and force strong onshore flow across SoCal. Winds will be strongest over the mts. deserts, and coastal waters. Wind and winter weather products may be needed for the mts/deserts as well as the coastal waters for the Sunday afternoon through Monday evening period.

Some light precip will break out over and west of the mts as well, and even though amounts will be limited, low snow-levels may create an impact to travelers through the mtn passes and at resort levels, especially later Mon/Mon night when the snow level will fall below 3000 FT in some areas. Up to a few inches of snow could accumulate in some spots above 4500 FT by Tue morning, but the main impact will be low windchills.

It will be much cooler through Tuesday. Maximum daytime temperatures on Monday may not get out of the 50s west of the mts, 30s at mtn

**February 19, 2018 Exceptional Event, Imperial County**

resorts, and 40s over the high deserts. This equates to widespread maximum daytime temps of from 8 to 15 degrees below average.

Some moderation in temperatures will occur during the midweek period, but continued troughing over the West will keep them below average for this time of year. Generally, the ECMWF model has handled the transition to lower heights/thickness over the West better than the GFS operational runs. If we follow the latest 12Z run into next weekend, it looks like another cold trough could drop south over the West with another chance of light precip and well below average temps.

&&

**.AVIATION...**

172100Z...FEW-SCT clouds at or abv 20000 ft MSL and unrestricted VIS through this evening. Low clouds and fog will develop along the coast aft 06Z Sunday, with bases around 500 feet MSL and areas of VIS below 1 mile. KCRQ and KSNA have the best chance of fog by early Sunday morning, although timing is uncertain. Bases will lift as the low clouds spread inland overnight into Sunday morning. Low clouds could reach the coastal mtn slopes Sunday afternoon, but cigs will likely be 3000 ft MSL or higher by then.

&&

**.MARINE...**

No hazardous weather is expected through Sunday. West-northwest winds gusting around 30 kt, and combined seas of 7-11 ft with steep waves are likely Sunday night through early Tuesday. These conditions will be hazardous to small craft. Conditions will improve by Tuesday afternoon.

&&

**.SKYWARN...**

Skywarn activation is not requested. However weather spotters are encouraged to report significant weather conditions.

&&

**.SGX WATCHES/WARNINGS/ADVISORIES...**

CA...NONE.

PZ...Small Craft Advisory from 10 PM Sunday to 6 AM PST Tuesday for Coastal Waters from San Mateo Point to the Mexican Border and out to 30 nm-Waters from San Mateo point to the Mexican Border Extending 30 to 60 nm out including San Clemente Island.

&&

\$\$

☐

314

FXUS65 KPSR 172058

AFDPSR

Area Forecast Discussion

National Weather Service Phoenix AZ

155 PM MST Sat Feb 17 2018

.SYNOPSIS...

Near normal temperatures this weekend will cool drastically early next week as a low pressure system drops southward through the southern Rockies and Desert Southwest. There will also be a chance of showers beginning Sunday night and continuing through early Tuesday primarily across the higher terrain north and east of Phoenix. In the wake of the low pressure system, cooler than normal temperatures will persist into next weekend.

&&

.DISCUSSION...

After fog had burned off this morning, only modest drying of the boundary layer has occurred so far with weak advective processes at work. Model mean output suggests further drying this afternoon such that crossover dewpoint/ambient temperature thresholds may be more difficult to achieve. Nevertheless while the synoptic setup is not optimal for fog redevelopment, a few lower lying locations could see more hazy/light fog conditions Sunday morning. Otherwise, a remnant southern stream shortwave will shear into the mean flow ahead of aggressive height falls progressing down the West Coast resulting in increased cloud cover and moisture Sunday afternoon.

All models continue to indicate that a well defined deep trough will drop southward into northern Arizona Monday and Tuesday. Ahead of this system, vorticity and jet-forced ascent will increase; and the cyclonic flow ahead of the trough and in association with moisture fetch trailing the aforementioned remnant southern stream wave will result in sufficient moisture transport for precipitation, particularly into central Arizona. A very favorable upslope component will generate areas of light rainfall, particularly across the higher terrain from Phoenix north and eastward as early as Sunday evening. In addition Sunday evening, robust height falls surging into SE California will promote stronger winds and at least a localized blowing dust threat.

Conditions will grow even more favorable for light precipitation from Phoenix into higher elevations Monday along a steep frontal boundary charging into central Arizona. While PWATs will be no where

near the levels experienced earlier in the week, this is a much colder system and the favorable orographic component should efficiently squeeze out whatever moisture is entrained along the frontal boundary. Have made some rather marked increases to Pops Monday feeling isold light showers forming on the foothills will lift into a fairly good shield of light rain over the eastern parts of the forecast area.

Latest hi-res WRFs also indicate that the anomalously strong wind fields will translate eastward into breezy conditions at the surface as height falls spread closer to the CWA. While its unlikely the trough ends up stronger than forecast, some advisory type winds may be possible; though fortunately, higher humidity levels will preclude much of a fire danger. With such a pronounced cold core system (H7 temperatures falling below -10C), have cut forecast highs Monday and Tuesday closer to raw blended guidance and towards the lower tercile of available model output. Across the higher terrain, this cold core system will result in snow levels low enough for at least a dusting of snow across the highest peaks. Although the probability of a freeze event becomes increasingly unlikely through February, there is a slight chance that outlying lower desert locations will drop just below freezing Wednesday morning.

Latest extended guidance indicates that a longwave trough will persist across the Intermountain West through next weekend. This will generally result in cooler than normal conditions along with the passage of a few short wave troughs. However, both the GEFS and EPS show little potential for significant precipitation.

&&

.AVIATION...

South-Central Arizona including KPHX, KIWA, and SDL:

Scattered to broken deck of high cirrus abv FL200 is streaming over the region. Some leftover fog affected the terminals this morning but burned off after sunrise. Winds are very light and variable today. High cloud deck expected to slowly dissipate this evening. Expect little chance for a repeat of the fog for Sunday morning.

Southeast California/Southwest Arizona including KIPL and KBLH:

Light and mostly variable winds with only some scattered high clouds through the period.

Aviation Discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Monday through Friday:

A low pressure system will bring a chance of precipitation, mainly to the higher terrain north and east of Phoenix through Tuesday morning. However, rain totals will generally remain below a tenth of an inch. Cooler and drier conditions are expected behind this system with below normal temperatures persisting through the week.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...None.

&&

\$\$

Visit us on Facebook, Twitter, and at [weather.gov/phoenix](http://weather.gov/phoenix)

DISCUSSION...MO/Hirsch

AVIATION...Waters

FIRE WEATHER...Hirsch

# IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

## Department of Agronomy

716 Farm House Ln

Ames, IA 50011

[akrherz@iastate.edu](mailto:akrherz@iastate.edu)

515-294-5978 phone

□

131

WWUS76 KSGX 180132

NPWSGX

URGENT - WEATHER MESSAGE

National Weather Service San Diego CA

532 PM PST Sat Feb 17 2018

CAZ060&gt;062-065-181415-

/O.NEW.KSGX.WI.Y.0006.180218T2200Z-180220T0200Z/

Apple and Lucerne Valleys-Coachella Valley-

San Diego County Deserts-San Geronio Pass Near Banning-

Including the cities of Victorville, Hesperia, Apple Valley,

Indio, Palm Springs, Cathedral City, Palm Desert,

Palm Desert Country, La Quinta, Coachella, Borrego Springs,

Banning, and Desert Hot Springs

532 PM PST Sat Feb 17 2018

...WIND ADVISORY IN EFFECT FROM 2 PM SUNDAY TO 6 PM PST MONDAY...

The National Weather Service in San Diego has issued a Wind Advisory...which is in effect from 2 PM Sunday to 6 PM PST Monday.

- \* Winds...Strong west winds with occasional gusts up to 55 mph. Strongest winds immediately below mountain passes and along the foothills.
- \* Timing...Winds becoming gusty Sunday afternoon with the strongest winds Sunday night through Monday.
- \* Impacts...Strong winds will make travel difficult for high-profile vehicles. Blowing dust and sand may reduce visibility to near-zero in a few locations.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that winds of 35 mph are expected. Winds this strong can make driving difficult...especially for high profile vehicles. Use extra caution.

&amp;&amp;

\$\$

jmb

[weather.gov/sandiego](http://weather.gov/sandiego)



786  
FXUS66 KSGX 180535 AAA  
AFDSGX

Area Forecast Discussion  
National Weather Service San Diego CA  
930 PM PST Sat Feb 17 2018

.SYNOPSIS...

A cold low pressure system will be moving into the Great Basin Sunday and Monday. Strong westerly winds will develop over the mountains and deserts, and some light rain and snow showers may break out, creating wintry conditions over the mountains Sunday night through Monday night. Dry and a little warmer midweek, then cooler again next weekend with another chance for light precipitation as another cold trough moves south along the Coast.

&&

.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE...  
SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO  
COUNTIES...

Winter Weather Advisory and Wind Advisory headlines were added to the forecast for the upcoming cold winter storm. The low clouds were removed from the forecast for this evening although we will probably see some scattered low clouds develop by Sunday morning. No other significant changes were made to the forecast this evening. Otherwise the previous forecast discussion remains valid below.

...Previous forecast discussion...

Our string of exceptional winter weather is about to come to an end as the atmosphere undergoes an adjustment favoring troughing over the West. Monday could be the coolest day over a good chunk of the CWA since last winter. A large, cold, low pressure trough will drop into the Great Basin through Monday. It will drop sfc pressure over the interior west, and force strong onshore flow across SoCal. Winds will be strongest over the mts. deserts, and coastal waters. Wind and winter weather products may be needed for the mts/deserts as well as the coastal waters for the Sunday afternoon through Monday evening period.

Some light precip will break out over and west of the mts as well, and even though amounts will be limited, low snow-levels may create an impact to travelers through the mtn passes and at resort levels, especially later Mon/Mon night when the snow level will fall below 3000 FT in some areas. Up to a few inches of snow could accumulate in some spots above 4500 FT by Tue morning, but the main impact will be low windchills.

It will be much cooler through Tuesday. Maximum daytime temperatures on Monday may not get out of the 50s west of the mts, 30s at mtn

**February 19, 2018 Exceptional Event, Imperial County**

resorts, and 40s over the high deserts. This equates to widespread maximum daytime temps of from 8 to 15 degrees below average.

Some moderation in temperatures will occur during the midweek period, but continued troughing over the West will keep them below average for this time of year. Generally, the ECMWF model has handled the transition to lower heights/thickness over the West better than the GFS operational runs. If we follow the latest 12Z run into next weekend, it looks like another cold trough could drop south over the West with another chance of light precip and well below average temps.

&&

**.AVIATION...**

180500Z...Areas of stratus/fog will likely reach the coast between 12Z and 15Z Sun. Cloud bases will initially be low, 600 feet MSL or less, but will rise rapidly around 15Z Sun. The initial low bases could affect KSAN, KCRQ and KSNA. Areas of vis below 3 miles will likely occur over higher coastal terrain 12Z-15Z Sun, but mostly improve after 15Z Sun. Otherwise, occasional high clouds above 20000 ft MSL will continue through Sunday. Clouds will increase rapidly Sunday evening from the mountains west to the coast, with bases mostly 2000-3000 ft MSL with higher terrain obscured, and SHRA could develop late Sunday night.

&&

**.MARINE...**

No hazardous weather is expected through Sunday. West-northwest winds will increase to 20-35 kt late Sunday night and continue through Monday night with local gusts to 40 kt possible in the outer waters Monday morning. A gale watch has been issued for the outer waters 10 PM Sunday through 6 AM Tuesday where highest winds will occur, with a small craft advisory in the inner waters for the same period. Combined seas of 7-13 ft with steep waves are likely Sunday night through early Tuesday. Conditions will improve Tuesday.

&&

**.SKYWARN...**

Skywarn activation is not requested. However weather spotters are encouraged to report significant weather conditions.

&&

**.SGX WATCHES/WARNINGS/ADVISORIES...**

CA...Winter Weather Advisory from 6 PM Sunday to 10 PM PST Monday for Riverside County Mountains-San Bernardino County Mountains-San Diego County Mountains.

Wind Advisory from 2 PM Sunday to 6 PM PST Monday for Apple and Lucerne Valleys-Coachella Valley-San Diego County Deserts-San Geronio Pass Near Banning.

**February 19, 2018 Exceptional Event, Imperial County****Appendix A**

PZ...Gale Watch from Sunday evening through late Monday night for Waters from San Mateo point to the Mexican Border Extending 30 to 60 nm out including San Clemente Island.

Small Craft Advisory from 10 PM Sunday to 6 AM PST Tuesday for Coastal Waters from San Mateo Point to the Mexican Border and out to 30 nm.

&&

\$\$

PUBLIC...jad/jmb  
AVIATION/MARINE...Maxwell

# IOWA STATE UNIVERSITY

College of Ag  
Department of Agronomy

**Department of Agronomy**

716 Farm House Ln  
Ames, IA 50011

akrherz@iastate.edu

515-294-5978 phone



Facebook



Twitter



Github



YouTube



RSS

┌  
334  
WWUS75 KPSR 180945  
NPWPSR

URGENT - WEATHER MESSAGE  
National Weather Service Phoenix AZ  
245 AM MST Sun Feb 18 2018

CAZ562-566-182145-  
/O.NEW.KPSR.WI.Y.0004.180218T2200Z-180220T0400Z/  
Imperial County Southwest-Imperial County West-  
Including the cities of Mountain Spring, Coolidge Springs,  
Salton City, Winona, Coyote Wells, Ocotillo, and Plaster City  
145 AM PST Sun Feb 18 2018

...WIND ADVISORY IN EFFECT FROM 2 PM THIS AFTERNOON TO 8 PM PST  
MONDAY...

The National Weather Service in Phoenix has issued a Wind  
Advisory, which is in effect from 2 PM this afternoon to 8 PM PST  
Monday.

- \* AFFECTED AREA...Southwest Imperial County including Interstate 8
- \* TIMING...Sunday afternoon through Monday evening
- \* WINDS...West winds 30 to 40 mph with gusts up to 55 mph
- \* IMPACTS...Strong winds in far southwestern Imperial County will  
create difficult and hazardous driving conditions, especially  
for high profile vehicles. Areas of blowing dusts may also lead  
to sharply reduced visibilities.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between  
30 and 40 mph are expected, or wind gusts of between 40 and  
58 mph. Winds this strong can make driving difficult, especially  
for high profile vehicles. In addition, strong winds over desert  
areas could result in briefly lowered visibilities to well under  
a mile at times in blowing dust or blowing sand. Use extra  
caution.

&&

\$\$

CAZ560-182145-  
/O.NEW.KPSR.WI.Y.0004.180218T2200Z-180220T0400Z/  
Joshua Tree NP West-  
Including the cities of Cottonwood Visitor and Lost Horse-Keys  
Village  
145 AM PST Sun Feb 18 2018

**February 19, 2018 Exceptional Event, Imperial County****Appendix A**

...WIND ADVISORY IN EFFECT FROM 2 PM THIS AFTERNOON TO 8 PM PST MONDAY...

The National Weather Service in Phoenix has issued a Wind Advisory, which is in effect from 2 PM this afternoon to 8 PM PST Monday.

- \* AFFECTED AREA...Joshua Tree National Park
- \* TIMING...Sunday afternoon through Monday evening
- \* WINDS...West winds 25 to 35 mph with gusts up to 45 mph.
- \* IMPACTS...Strong winds in Joshua Tree National Park will create difficult and hazardous driving conditions, especially for high profile vehicles. Areas of blowing dusts may also lead to sharply reduced visibilities.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

&&

\$\$

CAZ563>565-567-568-182145-  
/O.NEW.KPSR.WI.Y.0004.180219T1900Z-180220T0400Z/  
Salton Sea-Chuckwalla Mountains-Imperial County Southeast-  
Imperial Valley-Chiriaco Summit-  
Including the cities of Desert Shores,  
Imperial Hot Mineral Springs, Winterhaven, El Centro, Calexico,  
Alamorio, Brawley, and Chiriaco Summit  
145 AM PST Sun Feb 18 2018

...WIND ADVISORY IN EFFECT FROM 11 AM TO 8 PM PST MONDAY...

The National Weather Service in Phoenix has issued a Wind Advisory, which is in effect from 11 AM to 8 PM PST Monday.

- \* AFFECTED AREA...Imperial County including the city of El Centro.
- \* TIMING...Late Monday morning through Monday evening
- \* WINDS...West winds 20-30 mph with gusts up to 40 mph

**February 19, 2018 Exceptional Event, Imperial County****Appendix A**

\* IMPACTS...Windy conditions over Imperial County will create difficult and hazardous driving conditions, especially for high profile vehicles. Areas of blowing dusts may also lead to sharply reduced visibilities.

**PRECAUTIONARY/PREPAREDNESS ACTIONS...**

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

&amp;&amp;

\$\$

# IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

**Department of Agronomy**

716 Farm House Ln

Ames, IA 50011

akrherz@iastate.edu

515-294-5978 phone



Facebook



Twitter



Github



YouTube



RSS

☐

160

FXUS65 KPSR 181040

AFDPSR

Area Forecast Discussion

National Weather Service Phoenix AZ

340 AM MST Sun Feb 18 2018

.SYNOPSIS...

Near normal temperatures on Sunday will cool drastically early next week as a low pressure system drops southward through the southern Rockies and Desert Southwest. There will also be a chance of showers beginning Sunday night and continuing through early Tuesday primarily across the higher terrain north and east of Phoenix. In the wake of the low pressure system, cooler than normal temperatures will persist into next weekend.

&&

.DISCUSSION...

Latest satellite imagery this morning shows a few/broken high level clouds moving across the desert southwest under the southwesterly flow aloft. These clouds have had little impact on overnight cooling as temperatures are running similar to what they were at this time yesterday. With slightly drier conditions this morning, there has been no reports of fog although some light haze around sunrise cannot be ruled out for areas like Casa Grande.

An upper level trough currently positioned over the Pacific Northwest will progress southward today towards our area. This will act to tighten pressure gradients at the surface and in the lower atmosphere increasing our southwesterly flow. This

southwesterly flow will subsequently advect moisture across our area this afternoon increasing PWs from roughly 0.4 inches to around 0.6 inches by this evening. This combined with weak synoptic lift will bring a slight chance of light showers to the Phoenix area as early as this evening. However, much higher chances will exist just to our east over Gila County where the cooling generated by the orographic lift will help squeeze out some precipitation.

Surface winds will be the primary concern today, mainly out in SE California where the effects of the trough will first be realized. Speeds will steadily increase today with advisory criteria winds expected at Joshua Tree National Park and southwestern Imperial



County by late this afternoon. Areas of blowing dust may also accompany these winds creating for difficult and potentially hazardous travel across the area.

The associated surface front with the aforementioned trough is forecast to reach SE California early Monday morning and the Phoenix metro later that afternoon. The front is expected to be dry for the lower elevations but will be packing much colder and drier air behind it. Additionally, since the front is forecast to move through Phoenix during the afternoon when we see our strongest daytime heating/mixing, strong winds, possibly advisory criteria, may be realized. At this point, we have held off on issuing a wind advisory for Phoenix but may need to be considered in later forecast packages. After the front races through Monday evening, bone dry air will follow effectively shutting off precipitation chances for the higher elevations by Tuesday morning.

Despite sunny conditions, Tuesday is looking to be one of the coldest days, if not the coldest, so far this winter. 850 mb temperatures are only forecast to be around 1C, which could translate into surface high temperatures in the mid 50s! The cold airmass may also bring about near freezing overnight temperatures for many suburbs around Phoenix. In fact, the coldest lower desert locations may even drop below freezing Wednesday morning.

Models and ensembles continue to keep a long wave trough over our area through the weekend. Of course, the airmass will undoubtedly modify bringing a slight warming trend Wed/Thus but 70s may not return until sometime next week. Besides this, the GFS and ECMWF show another disturbance rotating through the trough come Friday. This system will also be relatively cold and will subsequently be lacking any substantial moisture. However, the main impact will likely be breezy conditions and light snow above 4000 ft if in fact it does materialize.

&&

.AVIATION...

South-Central Arizona including KPHX, KIWA, and SDL:

SCT-BKN high cirrus decks and light easterly winds tonight and early Sunday to give way to increasing westerly winds and lower cigs by Sunday afternoon/evening as a cold front/associated Pacific upper low approaches the region from the northwest. FEW-SCT cloud layers in the 6-8k foot range are likely to develop by Sunday afternoon, with these cloud layers expanding into the SCT-BKN range along with the development of scattered light showers by Sunday evening.

Westerly winds are expected to continue through Sunday night with gusts as high as 25 knots possible.

Southeast California/Southwest Arizona including KIPL and KBLH:

Light winds tonight and early Sunday to give way to increasing westerly winds Sunday afternoon/evening as a cold front/associated Pacific upper low approaches the region from the northwest. Wind speeds as high as 20 knots with gusts as high as 30 knots are likely by Sunday afternoon at both KIPL and KBLH, along with possible blowing dust (confidence is too low to include blowing dust in the tafs at this time). SCT-BKN high cirrus decks to prevail at both terminals through the taf period.

Aviation Discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Monday through Friday:

A low pressure system will bring a chance of precipitation, mainly to the higher terrain north and east of Phoenix through Tuesday morning. However, rain totals will generally remain below a tenth of an inch. Cooler and drier conditions are expected behind this system with below normal temperatures persisting through the week.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...Wind Advisory from 2 PM this afternoon to 8 PM PST Monday for CAZ560-562-566.

Wind Advisory from 11 AM to 8 PM PST Monday for CAZ563>565-567-568.

&&

\$\$

Visit us on Facebook, Twitter, and at [weather.gov/phoenix](http://weather.gov/phoenix)

DISCUSSION...Wilson

☐

640

FXUS65 KPSR 181124

AFDPSR

Area Forecast Discussion

National Weather Service Phoenix AZ

424 AM MST Sun Feb 18 2018

.UPDATE...Updated fire weather discussion

&&

.SYNOPSIS...

Near normal temperatures on Sunday will cool drastically early next week as a low pressure system drops southward through the southern Rockies and Desert Southwest. There will also be a chance of showers beginning Sunday night and continuing through early Tuesday primarily across the higher terrain north and east of Phoenix. In the wake of the low pressure system, cooler than normal temperatures will persist into next weekend.

&&

.DISCUSSION...

Latest satellite imagery this morning shows a few/broken high level clouds moving across the desert southwest under the southwesterly flow aloft. These clouds have had little impact on overnight cooling as temperatures are running similar to what they were at this time yesterday. With slightly drier conditions this morning, there has been no reports of fog although some light haze around sunrise cannot be ruled out for areas like Casa Grande.

An upper level trough currently positioned over the Pacific Northwest will progress southward today towards our area. This will act to tighten pressure gradients at the surface and in the lower atmosphere increasing our southwesterly flow. This southwesterly flow will subsequently advect moisture across our area this afternoon increasing PWs from roughly 0.4 inches to around 0.6 inches by this evening. This combined with weak synoptic lift will bring a slight chance of light showers to the Phoenix area as early as this evening. However, much higher chances will exist just to our east over Gila County where the cooling generated by the orographic lift will help squeeze out some precipitation.

Surface winds will be the primary concern today, mainly out in SE California where the effects of the trough will first be realized. Speeds will steadily increase today with advisory criteria winds expected at Joshua Tree National Park and southwestern Imperial County by late this afternoon. Areas of blowing dust may also accompany these winds creating for difficult and potentially hazardous travel across the area.

The associated surface front with the aforementioned trough is forecast to reach SE California early Monday morning and the Phoenix metro later that afternoon. The front is expected to be dry for the lower elevations but will be packing much colder and drier air behind it. Additionally, since the front is forecast to move through Phoenix during the afternoon when we see our strongest daytime heating/mixing, strong winds, possibly advisory criteria, may be realized. At this point, we have held off on issuing a wind advisory for Phoenix but may need to be considered in later forecast packages. After the front races through Monday evening, bone dry air will follow effectively shutting off precipitation chances for the higher elevations by Tuesday morning.

Despite sunny conditions, Tuesday is looking to be one of the coldest days, if not the coldest, so far this winter. 850 mb temperatures are only forecast to be around 1C, which could translate into surface high temperatures in the mid 50s! The cold airmass may also bring about near freezing overnight temperatures for many suburbs around Phoenix. In fact, the coldest lower desert locations may even drop below freezing Wednesday morning.

Models and ensembles continue to keep a long wave trough over our area through the weekend. Of course, the airmass will undoubtedly modify bringing a slight warming trend Wed/Thus but 70s may not return until sometime next week. Besides this, the GFS and ECMWF show another disturbance rotating through the trough come Friday. This system will also be relatively cold and will subsequently be lacking any substantial moisture. However, the main impact will likely be breezy conditions and light snow above 4000 ft if in fact it does materialize.

&&

.AVIATION...

South-Central Arizona including KPHX, KIWA, and SDL:

SCT-BKN high cirrus decks and light easterly winds tonight and early Sunday to give way to increasing westerly winds and lower cigs by Sunday afternoon/evening as a cold front/associated Pacific upper low approaches the region from the northwest. FEW-SCT cloud layers

in the 6-8k foot range are likely to develop by Sunday afternoon, with these cloud layers expanding into the SCT-BKN range along with the development of scattered light showers by Sunday evening. Westerly winds are expected to continue through Sunday night with gusts as high as 25 knots possible.

Southeast California/Southwest Arizona including KIPL and KBLH:

Light winds tonight and early Sunday to give way to increasing westerly winds Sunday afternoon/evening as a cold front/associated Pacific upper low approaches the region from the northwest. Wind speeds as high as 20 knots with gusts as high as 30 knots are likely by Sunday afternoon at both KIPL and KBLH, along with possible blowing dust (confidence is too low to include blowing dust in the tafs at this time). SCT-BKN high cirrus decks to prevail at both terminals through the taf period.

Aviation Discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Tuesday through Saturday: A cold front moving through on Monday will bring unseasonably cold weather to the area on Tuesday with highs 15 degrees below average. After this, temperatures will begin a gradual warming trend. Very dry air will exist over our area from Tuesday through at least Thursday with daytime humidity minimums in the teens and single digits. Generally poor overnight recoveries are expected however winds are forecast to be rather light during this period. A weak weather disturbance may move through on Friday bringing a slight chance of precipitation but accumulations will amount to little if any.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...Wind Advisory from 2 PM this afternoon to 8 PM PST Monday for CAZ560-562-566.

Wind Advisory from 11 AM to 8 PM PST Monday for CAZ563>565-567-568.

&&

┌  
920

WWUS76 KSGX 181247  
NPWSGX

## SEE LAST PAGE FOR SAN DIEGO DESERTS

URGENT - WEATHER MESSAGE  
National Weather Service San Diego CA  
447 AM PST Sun Feb 18 2018

...AREAS OF STRONG GUSTY WINDS FOR THIS AFTERNOON THROUGH MONDAY...  
...AREAS OF NEAR FREEZING TEMPERATURES WITH AREAS OF FROST FOR  
MONDAY NIGHT AND TUESDAY NIGHT IN THE VALLEYS...

.A cold low pressure system from the north will bring periods of strong  
gusty west winds for this afternoon through Monday. As the storm  
moves east...cold nights will follow with areas of frost and  
freeze conditions for portions of the valleys and through the San  
Gorgonio Pass.

CAZ048-182230-  
/O.NEW.KSGX.FZ.W.0001.180220T0600Z-180220T1700Z/  
/O.NEW.KSGX.FR.Y.0003.180221T0600Z-180221T1600Z/  
San Bernardino and Riverside County Valleys-The Inland Empire-  
Including the cities of Riverside, San Bernardino, Ontario,  
Moreno Valley, Fontana, Rancho Cucamonga, and Corona  
447 AM PST Sun Feb 18 2018

...FREEZE WARNING IN EFFECT FROM 10 PM MONDAY TO 9 AM PST  
TUESDAY...  
...FROST ADVISORY IN EFFECT FROM 10 PM TUESDAY TO 8 AM PST  
WEDNESDAY...

The National Weather Service in San Diego has issued a Freeze  
Warning...which is in effect from 10 PM Monday to 9 AM PST  
Tuesday. a Frost Advisory has also been issued. This Frost  
Advisory is in effect from 10 PM Tuesday to 8 AM PST Wednesday.

- \* Temperature...Falling into the upper 20s to mid 30s for late  
Monday night into Tuesday morning...and into the 30s for late  
Tuesday night into Wednesday morning.
- \* Duration...Several hours of temperatures sufficient for frost  
each night with 4 to 6 hours of temperatures near or below  
freezing in the colder locations For late Monday night into  
Tuesday morning..
- \* Location...Coldest temperatures in lower lying wind-sheltered  
areas...especially in southern and eastern portions of the  
Inland Empire.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Freeze Warning means sub-freezing temperatures are imminent or  
highly likely. These conditions will kill crops and other

- **February 19, 2018 Exceptional Event, Imperial County**  
sensitive vegetation.

A Frost Advisory means that widespread frost is expected.  
Sensitive outdoor plants may be killed if left uncovered.

&&

\$\$

CAZ060-182230-

/O.UPG.KSGX.WI.Y.0006.180218T2200Z-180220T0200Z/

/O.NEW.KSGX.HW.W.0003.180218T2200Z-180220T0200Z/

Apple and Lucerne Valleys-

Including the cities of Victorville, Hesperia, and Apple Valley

447 AM PST Sun Feb 18 2018

...HIGH WIND WARNING IN EFFECT FROM 2 PM THIS AFTERNOON TO 6 PM  
PST MONDAY...

The National Weather Service in San Diego has issued a High Wind  
Warning...which is in effect from 2 PM this afternoon to 6 PM PST  
Monday. The Wind Advisory is no longer in effect.

\* Winds...Southwest to west winds 20 to 30 mph with gusts to 50  
mph. Local gusts to 65 mph.

\* Timing...Winds strengthening today with the strongest winds for  
late this afternoon through late tonight.

\* Location...Strongest winds near the foothills of the mountains.

\* Visibility...Reduced in blowing dust and sand at times.

\* Impacts...Strong winds will make travel difficult for high-  
profile vehicles. Blowing dust and sand may reduce visibility  
to near-zero in a few locations

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A High Wind Warning means a hazardous high wind event is expected  
or occurring. Sustained wind speeds of at least 40 mph or gusts  
of 58 mph or more can lead to property damage.

&&

\$\$

CAZ065-182230-

/O.NEW.KSGX.FR.Y.0002.180220T0600Z-180220T1700Z/

/O.CON.KSGX.WI.Y.0006.180218T2200Z-180220T0200Z/

San Geronio Pass Near Banning-

Including the cities of Banning and Desert Hot Springs

447 AM PST Sun Feb 18 2018

**February 19, 2018 Exceptional Event, Imperial County****Appendix A**

...WIND ADVISORY REMAINS IN EFFECT FROM 2 PM THIS AFTERNOON TO 6 PM PST MONDAY...

...FROST ADVISORY IN EFFECT FROM 10 PM MONDAY TO 9 AM PST TUESDAY...

The National Weather Service in San Diego has issued a Frost Advisory...which is in effect from 10 PM Monday to 9 AM PST Tuesday.

- \* Winds...Areas of west winds 25 to 35 mph with gusts to 55 mph. Isolated gusts to 70 mph in the northern Coachella Valley below the San Geronio Pass for this afternoon through Monday.
- \* Temperatures...Falling into the lower to mid 30s for late Monday night into Tuesday morning with areas of frost possible.
- \* Duration...Several hours of temperatures sufficient for frost for late Monday night into Tuesday morning..
- \* Impacts...Strong winds will make travel difficult for high-profile vehicles. Sensitive outdoor plants may be killed if left uncovered.

#### PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that winds of 35 mph are expected. Winds this strong can make driving difficult...especially for high profile vehicles. Use extra caution.

A Frost Advisory means that widespread frost is expected. Sensitive outdoor plants may be killed if left uncovered.

&&

\$\$

CAZ050-182230-

/O.NEW.KSGX.FR.Y.0002.180220T0600Z-180220T1700Z/

/O.EXB.KSGX.WI.Y.0006.180219T1600Z-180220T0200Z/

San Diego County Valleys-

Including the cities of Escondido, El Cajon, San Marcos, La Mesa, Santee, and Poway

447 AM PST Sun Feb 18 2018

...WIND ADVISORY IN EFFECT FROM 8 AM TO 6 PM PST MONDAY...

...FROST ADVISORY IN EFFECT FROM 10 PM MONDAY TO 9 AM PST TUESDAY...

The National Weather Service in San Diego has issued a Frost Advisory...which is in effect from 10 PM Monday to 9 AM PST Tuesday. a Wind Advisory has also been issued. This Wind Advisory is in effect from 8 AM to 6 PM PST Monday.

- \* Winds...Areas of winds west 15 to 25 mph with gusts to 40 mph



## February 19, 2018 Exceptional Event, Imperial County on Monday.

- \* Temperatures...Falling into the lower to mid 30s for late Monday night into Tuesday morning with areas of frost possible. Coldest temperatures in the inland valleys near the foothills of the mountains.
- \* Impacts...Strong winds will make travel difficult for high-profile vehicles. Watch for broken tree limbs and downed palm fronds. Sensitive outdoor plants may be killed if left uncovered.
- \* Outlook...Patchy frost is also possible late Tuesday night into Wednesday morning...mainly for the inland valleys near the foothills of the mountains.

### PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that winds of 35 mph are expected. Winds this strong can make driving difficult...especially for high profile vehicles. Use extra caution.

A Frost Advisory means that widespread frost is expected. Sensitive outdoor plants may be killed if left uncovered.

&&

\$\$

CAZ043-182230-  
/O.EXB.KSGX.WI.Y.0006.180219T1600Z-180220T0200Z/  
San Diego County Coastal Areas-  
Including the cities of Vista, Carlsbad, Encinitas, Chula Vista,  
National City, and San Diego  
447 AM PST Sun Feb 18 2018

...WIND ADVISORY IN EFFECT FROM 8 AM TO 6 PM PST MONDAY...

The National Weather Service in San Diego has issued a Wind Advisory...which is in effect from 8 AM to 6 PM PST Monday.

- \* Winds...Areas of winds west 15 to 25 mph with gusts to 40 mph.
- \* Location...Strongest gusts to 45 mph near the coast.
- \* Impacts...Strong winds will make travel difficult for high-profile vehicles. Watch for broken tree limbs and downed palm fronds.

### PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that winds of 35 mph are expected. Winds this strong can make driving difficult...especially for high profile vehicles. Use extra caution.

&amp;&amp;

\$\$

CAZ061-062-182230-

/O.CON.KSGX.WI.Y.0006.180218T2200Z-180220T0200Z/

Coachella Valley-San Diego County Deserts-

Including the cities of Indio, Palm Springs, Cathedral City,

Palm Desert, Palm Desert Country, La Quinta, Coachella,

and Borrego Springs

447 AM PST Sun Feb 18 2018

...WIND ADVISORY REMAINS IN EFFECT FROM 2 PM THIS AFTERNOON TO

6 PM PST MONDAY...

\* Winds...Areas of northwest to west winds 25 to 35 mph with gusts to 55 mph and isolated gusts to 70 mph.

\* Location...Strongest gusts near the mountains...and in the Coachella Valley north and east of Interstate 10.

\* Impacts...Strong winds will make travel difficult for high-profile vehicles. Blowing dust and sand may reduce visibility to near zero in a few locations.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that winds of 35 mph are expected. Winds this strong can make driving difficult...especially for high profile vehicles. Use extra caution.

&amp;&amp;

\$\$

17

# IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

## Department of Agronomy

716 Farm House Ln

Ames, IA 50011

☐

787

FXUS65 KPSR 181149

AFDPSR

Area Forecast Discussion

National Weather Service Phoenix AZ

449 AM MST Sun Feb 18 2018

.UPDATE...Updated Aviation discussion.

&&

.SYNOPSIS...

Near normal temperatures on Sunday will cool drastically early next week as a low pressure system drops southward through the southern Rockies and Desert Southwest. There will also be a chance of showers beginning Sunday night and continuing through early Tuesday primarily across the higher terrain north and east of Phoenix. In the wake of the low pressure system, cooler than normal temperatures will persist into next weekend.

&&

.DISCUSSION...

Latest satellite imagery this morning shows a few/broken high level clouds moving across the desert southwest under the southwesterly flow aloft. These clouds have had little impact on overnight cooling as temperatures are running similar to what they were at this time yesterday. With slightly drier conditions this morning, there has been no reports of fog although some light haze around sunrise cannot be ruled out for areas like Casa Grande.

An upper level trough currently positioned over the Pacific Northwest will progress southward today towards our area. This will act to tighten pressure gradients at the surface and in the lower atmosphere increasing our southwesterly flow. This southwesterly flow will subsequently advect moisture across our area this afternoon increasing PWs from roughly 0.4 inches to around 0.6 inches by this evening. This combined with weak synoptic lift will bring a slight chance of light showers to the Phoenix area as early as this evening. However, much higher chances will exist just to our east over Gila County where the cooling generated by the orographic lift will help squeeze out some precipitation.

Surface winds will be the primary concern today, mainly out in SE

California where the effects of the trough will first be realized. Speeds will steadily increase today with advisory criteria winds expected at Joshua Tree National Park and southwestern Imperial County by late this afternoon. Areas of blowing dust may also accompany these winds creating for difficult and potentially hazardous travel across the area.

The associated surface front with the aforementioned trough is forecast to reach SE California early Monday morning and the Phoenix metro later that afternoon. The front is expected to be dry for the lower elevations but will be packing much colder and drier air behind it. Additionally, since the front is forecast to move through Phoenix during the afternoon when we see our strongest daytime heating/mixing, strong winds, possibly advisory criteria, may be realized. At this point, we have held off on issuing a wind advisory for Phoenix but may need to be considered in later forecast packages. After the front races through Monday evening, bone dry air will follow effectively shutting off precipitation chances for the higher elevations by Tuesday morning.

Despite sunny conditions, Tuesday is looking to be one of the coldest days, if not the coldest, so far this winter. 850 mb temperatures are only forecast to be around 1C, which could translate into surface high temperatures in the mid 50s! The cold airmass may also bring about near freezing overnight temperatures for many suburbs around Phoenix. In fact, the coldest lower desert locations may even drop below freezing Wednesday morning.

Models and ensembles continue to keep a long wave trough over our area through the weekend. Of course, the airmass will undoubtedly modify bringing a slight warming trend Wed/Thus but 70s may not return until sometime next week. Besides this, the GFS and ECMWF show another disturbance rotating through the trough come Friday. This system will also be relatively cold and will subsequently be lacking any substantial moisture. However, the main impact will likely be breezy conditions and light snow above 4000 ft if in fact it does materialize.

&&

.AVIATION...

South-Central Arizona including KPHX, KIWA, and SDL:

Breezy conditions will develop this afternoon and persist overnight ahead of an approaching low pressure system.

Southwesterly gusts to 20 kt will be possible, particularly at KPHX. Low-level moisture will also be on the increase, leading to the development of stratocu with bases around 6k ft as early as Sunday afternoon. Scattered showers are also expected to develop,

mainly after 00z Monday and across the higher terrain north and east of Phoenix. Across the Phoenix area, precipitation will be most likely at KSDL and a mention of VCSH was included in the TAF.

Southeast California/Southwest Arizona including KIPL and KBLH: Breezy to windy conditions will develop ahead of an approaching low pressure system. Although gusts to 25 kt will be possible during the afternoon, latest model guidance suggests that winds will subside somewhat overnight, particularly at KIPL.

Aviation Discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Tuesday through Saturday: A cold front moving through on Monday will bring unseasonably cold weather to the area on Tuesday with highs 15 degrees below average. After this, temperatures will begin a gradual warming trend. Very dry air will exist over our area from Tuesday through at least Thursday with daytime humidity minimums in the teens and single digits. Generally poor overnight recoveries are expected however winds are forecast to be rather light during this period. A weak weather disturbance may move through on Friday bringing a slight chance of precipitation but accumulations will amount to little if any.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...Wind Advisory from 2 PM this afternoon to 8 PM PST Monday for CAZ560-562-566.

Wind Advisory from 11 AM to 8 PM PST Monday for CAZ563>565-567-568.

&&

\$\$

Visit us on Facebook, Twitter, and at [weather.gov/phoenix](http://weather.gov/phoenix)

DISCUSSION...Wilson

190  
FXUS66 KSGX 181317  
AFDSGX

Area Forecast Discussion  
National Weather Service San Diego CA  
517 AM PST Sun Feb 18 2018

.SYNOPSIS...

A cold low pressure system from the north will bring much cooler weather...scattered mostly light showers along and west of the mountains for late this afternoon into Monday evening...and periods of strong gusty west winds in the mountains and deserts for this afternoon through Monday. Dry and a little warmer for Wednesday and Thursday. For Thursday night and Friday...another cold low pressure system from the north could bring additional mostly light showers. Drier and a little warmer for next weekend.

&&

.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE...  
SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO  
COUNTIES...

The coldest weather of the winter for Southern California is upcoming and will continue through the end of the month.

A cold low pressure system centered along the coast of southern British Columbia early this morning will move southward through the western states through Monday. Onshore flow will strengthen today with the strongest onshore flow expected for tonight and Monday. Coastal...valley...and mountain areas will be around 10 degrees cooler today than Saturday. Winds will strengthen for the mountains and deserts today with the strongest winds for this afternoon into Monday. Stronger winds will develop over the coastal waters late tonight and spread into coastal and valley areas of San Diego County on Monday.

Much cooler air will spread into Southern California for Monday and Tuesday with high temperatures for Monday 15 to 25 degrees below average with high temperatures Tuesday a few degrees warmer.

This low pressure system will bring scattered mainly light showers along and west of the mountains with the greatest coverage for late tonight through early Monday. Rainfall is expected to range from one tenth inch or less at the coast to one quarter to one third inch in the mountains with locally greater amounts. The snow level will lower from around 6000 feet late today to 3000 to 3500 feet for Monday through Monday evening with a few inches of snowfall possible above 4000 feet.

Cold nights will for Monday and Tuesday nights with temperatures

**February 19, 2018 Exceptional Event, Imperial County**

falling to near freezing in the valleys with areas of frost. Drier and a little warmer for Tuesday into Thursday with north to northwest flow aloft.

The global models continue to bring additional shortwaves southward along the west side of the longwave trough parked over the western states with the expected timing and intensity differences. One of these could bring additional chances for mostly light showers for late Thursday into Friday with next weekend drier and a little warmer but with continued below average temperatures.

The longwave trough axis could shift westward a little for the week of the 25th which would maintain the cooler than average temperatures...but increase the precipitation prospects somewhat.

&&

.AVIATION...

181030Z...Confidence in stratus impacting coastal aerodromes this morning is decreasing. Patches of low clouds currently near LA County may push south and affect KSNA, but chances look low at this time. Any low clouds that develop will have bases around 500 ft MSL and tops near 1000 ft MSL. VIS could also lower to 1-3 sm BR where low clouds near higher terrain. Otherwise, occasional high clouds above 20000 ft MSL will continue through this afternoon. Clouds will increase rapidly this evening from the mountains west to the coast, with bases mostly 2000-3000 ft MSL with higher terrain obscured. SHRA could develop late tonight through Monday morning.

&&

.MARINE...

No hazardous weather is expected through this afternoon. West-northwest winds will increase to 20-35 kt tonight and continue through Monday night, with local gusts to 40 kt possible in the outer waters Monday morning. A Gale Warning has been issued for the outer waters and a Small Craft Advisory remains in effect for the inner waters from 10 PM this evening through 6 AM Tuesday. Combined seas of 7-13 ft with steep waves are likely through the period. Conditions will improve Tuesday.

&&

.SKYWARN...

Skywarn activation is not requested. However weather spotters are encouraged to report significant weather conditions.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...Winter Weather Advisory from 6 PM this evening to 10 PM PST Monday for Riverside County Mountains-San Bernardino County Mountains-San Diego County Mountains.

Wind Advisory from 2 PM this afternoon to 6 PM PST Monday for Coachella Valley-San Diego County Deserts-San Geronio Pass Near Banning.

High Wind Warning from 2 PM this afternoon to 6 PM PST Monday for Apple and Lucerne Valleys.

Frost Advisory from 10 PM Monday to 9 AM PST Tuesday for San Diego County Valleys-San Geronio Pass Near Banning.

Wind Advisory from 8 AM to 6 PM PST Monday for San Diego County Coastal Areas-San Diego County Valleys.

Frost Advisory from 10 PM Tuesday to 8 AM PST Wednesday for San Bernardino and Riverside County Valleys-The Inland Empire.

Freeze Warning from 10 PM Monday to 9 AM PST Tuesday for San Bernardino and Riverside County Valleys-The Inland Empire.

PZ...Gale Warning from 10 PM this evening to 6 AM PST Tuesday for Waters from San Mateo point to the Mexican Border Extending 30 to 60 nm out including San Clemente Island.

Small Craft Advisory from 10 PM this evening to 6 AM PST Tuesday for Coastal Waters from San Mateo Point to the Mexican Border and out to 30 nm.

&&

\$\$

PUBLIC...17

AVIATION/MARINE...JJT

# IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

## Department of Agronomy

716 Farm House Ln

Ames, IA 50011



┌  
001  
FXUS66 KSGX 181651  
AFDSGX

Area Forecast Discussion  
National Weather Service San Diego CA  
850 AM PST Sun Feb 18 2018

.SYNOPSIS...

Onshore flow will be increasing today, becoming strong and gusty over the mountains and deserts late this afternoon and tonight as a cold low pressure trough drops south into the Great Basin. Scattered, light rain and snow showers will pop over and west of the mountains late tonight into Monday as the marine layer builds. Cooler today, and expect the coldest days of the winter so far on Monday and Tuesday. Dry and a little warmer for Wednesday and Thursday. Then cooler again into Friday, with a chance for some more light showers as another cold low pressure system drops into the Great Basin from the north. Dry and a little warmer into next weekend as temperatures edge back toward average.

&&

.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE...  
SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO  
COUNTIES...

Higher clouds were scattered over the CWA at 8 AM PST, with a thicker layer of mid-level clouds backed up against the San Diego County mtn coastal slopes. Patchy lower clouds were developing over the coastal waters and moving east onto the coast of Orange County.

Surface pressure gradients were accelerating onshore at 8 MBS KSN to SW NV, and 3 MBS to the lower deserts. This was supporting westerly wind gusts 35-45 MPH through wind-prone mtn areas. The 12Z Miramar sounding had a sfc-based inversion, with a weaker inversion near 7K FT MSL. Dewpoints surged in this layer boosting the overall PW to 0.48 inch. Winds below 15K Ft were westerly 15-25KT where yesterday they were easterly in this layer. Modest cooling of about 2 degrees C was noted below 6500 FT as well with large dewpoint depressions.

Provided the onshore ramps up quickly, our current forecast highs should be in the ball park, but based on the current sounding we could top out several degrees higher. The forecast was updated to reflect a minor increase in the max temps today, otherwise no changes.

From previous discussion...

The coldest weather of the winter for Southern California is upcoming and will continue through the end of the month.

A cold low pressure system centered along the coast of southern

**February 19, 2018 Exceptional Event, Imperial County****Appendix A**

British Columbia early this morning will move southward through the western states through Monday. Onshore flow will strengthen today with the strongest onshore flow expected for tonight and Monday. Coastal...valley...and mountain areas will be around 10 degrees cooler today than Saturday. Winds will strengthen for the mountains and deserts today with the strongest winds for this afternoon into Monday. Stronger winds will develop over the coastal waters late tonight and spread into coastal and valley areas of San Diego County on Monday.

Much cooler air will spread into Southern California for Monday and Tuesday with high temperatures for Monday 15 to 25 degrees below average with high temperatures Tuesday a few degrees warmer.

This low pressure system will bring scattered mainly light showers along and west of the mountains with the greatest coverage for late tonight through early Monday. Rainfall is expected to range from one tenth inch or less at the coast to one quarter to one third inch in the mountains with locally greater amounts. The snow level will lower from around 6000 feet late today to 3000 to 3500 feet for Monday through Monday evening with a few inches of snowfall possible above 4000 feet.

Cold nights will for Monday and Tuesday nights with temperatures falling to near freezing in the valleys with areas of frost. Drier and a little warmer for Tuesday into Thursday with north to northwest flow aloft.

The global models continue to bring additional shortwaves southward along the west side of the longwave trough parked over the western states with the expected timing and intensity differences. One of these could bring additional chances for mostly light showers for late Thursday into Friday with next weekend drier and a little warmer but with continued below average temperatures.

The longwave trough axis could shift westward a little for the week of the 25th which would maintain the cooler than average temperatures...but increase the precipitation prospects somewhat.

&&

.AVIATION...

181640Z...Mostly SCT-BKN clouds at or abv 6000 ft MSL and unrestricted vis will continue through this afternoon. Patchy low clouds currently vcnty KLGB with bases 700-1000 ft MSL not likely to impact TAF sites before 03Z Mon. Low clouds will increase rapidly this evening west of the mtns, with bases mostly 2000-3000 ft MSL, obscuring higher terrain. Timing of cigs blo 3000 ft MSL is uncertain. -SHRA could develop late tonight through Monday morning.

Southwest to west winds 25 to 35 mph with gusts to 55 mph will develop over mtn ridges between this evening and Monday afternoon.

**February 19, 2018 Exceptional Event-Imperial County****Appendix A**

The winds will produce strong up/downdrafts and LLWS over and east of the mtns. Strong and gusty southwest to west winds could also impact TAF sites in San Diego County Monday morning through Monday afternoon.

&&

.MARINE...

No hazardous weather is expected through this afternoon. West-northwest winds will increase to 20-30 kt tonight and continue through Monday night, with gusts 35 to 40 kt possible in the outer waters Monday morning. Combined seas of 9-12 ft with steep waves are likely through the period. Conditions will improve Tuesday.

&&

.SKYWARN...

Skywarn activation is not requested. However weather spotters are encouraged to report significant weather conditions.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...Winter Weather Advisory from 6 PM this evening to 10 PM PST Monday for Riverside County Mountains-San Bernardino County Mountains-San Diego County Mountains.

Wind Advisory from 2 PM this afternoon to 6 PM PST Monday for Coachella Valley-San Diego County Deserts-San Geronimo Pass Near Banning.

High Wind Warning from 2 PM this afternoon to 6 PM PST Monday for Apple and Lucerne Valleys.

Frost Advisory from 10 PM Monday to 9 AM PST Tuesday for San Diego County Valleys-San Geronimo Pass Near Banning.

Wind Advisory from 8 AM to 6 PM PST Monday for San Diego County Coastal Areas-San Diego County Valleys.

Frost Advisory from 10 PM Tuesday to 8 AM PST Wednesday for San Bernardino and Riverside County Valleys-The Inland Empire.

Freeze Warning from 10 PM Monday to 9 AM PST Tuesday for San Bernardino and Riverside County Valleys-The Inland Empire.

PZ...Gale Warning from 10 PM this evening to 6 AM PST Tuesday for Waters from San Mateo point to the Mexican Border Extending 30 to 60 nm out including San Clemente Island.

Small Craft Advisory from 10 PM this evening to 6 AM PST Tuesday for Coastal Waters from San Mateo Point to the Mexican Border and out to 30 nm.

☐

703

FXUS65 KPSR 181556

AFDPSR

Area Forecast Discussion

National Weather Service Phoenix AZ

855 AM MST Sun Feb 18 2018

.SYNOPSIS...

Near normal temperatures today will cool drastically the next several days as a low pressure system drops southward through the southern Rockies and Desert Southwest. There will also be a chance of showers tonight through early Tuesday with the best opportunities across the higher terrain north and east of Phoenix. In the wake of the low pressure system, cooler than normal temperatures will persist into the weekend.

&&

.DISCUSSION...

Modest heights falls were already spreading into the region this morning ahead of a deep trough digging towards the Great Basin. 12Z sounding data showed H5 heights already falling 4-8dm under growing cyclonic flow and ascent; and this is evidenced in satellite imagery by standing wave clouds forced off the higher terrain of northern Arizona. Mid/upper moisture continues to stream into the eastern half of Arizona though overall PWATs are not terribly far from typical at 2/3rds of an inch.

Despite the lowering heights today, deeper mixing should help temperatures realize levels at or even warmer than yesterday. Have pared back some of the POPs this afternoon feeling the best combination of lift, cooling aloft, and moisture transport will occur after sunset. However, based on early 12Z high resolution output, have increased POPs somewhat over Gila County tonight (and may increase these probabilities further) with very favorable

juxtaposition of orographics and synoptic ascent. Otherwise, conditions still look favorable for some mountain rotors to descend into western Imperial County tonight, and will continue the wind advisory as is.

&&

.PREVIOUS DISCUSSION...

/449 AM MST Sun Feb 18 2018/

An upper level trough currently positioned over the Pacific

Northwest will progress southward today towards our area. This will act to tighten pressure gradients at the surface and in the lower atmosphere increasing our southwesterly flow. This southwesterly flow will subsequently advect moisture across our area this afternoon increasing PWs from roughly 0.4 inches to around 0.6 inches by this evening. This combined with weak synoptic lift will bring a slight chance of light showers to the Phoenix area as early as this evening. However, much higher chances will exist just to our east over Gila County where the cooling generated by the orographic lift will help squeeze out some precipitation.

Surface winds will be the primary concern today, mainly out in SE California where the effects of the trough will first be realized. Speeds will steadily increase today with advisory criteria winds expected at Joshua Tree National Park and southwestern Imperial County by late this afternoon. Areas of blowing dust may also accompany these winds creating for difficult and potentially hazardous travel across the area.

The associated surface front with the aforementioned trough is forecast to reach SE California early Monday morning and the Phoenix metro later that afternoon. The front is expected to be dry for the lower elevations but will be packing much colder and drier air behind it. Additionally, since the front is forecast to move through Phoenix during the afternoon when we see our strongest daytime heating/mixing, strong winds, possibly advisory criteria, may be realized. At this point, we have held off on issuing a wind advisory for Phoenix but may need to be considered in later forecast packages. After the front races through Monday evening, bone dry air will follow effectively shutting off precipitation chances for the higher elevations by Tuesday morning.

Despite sunny conditions, Tuesday is looking to be one of the coldest days, if not the coldest, so far this winter. 850 mb temperatures are only forecast to be around 1C, which could translate into surface high temperatures in the mid 50s! The cold airmass may also bring about near freezing overnight temperatures for many suburbs around Phoenix. In fact, the coldest lower desert locations may even drop below freezing Wednesday morning.

Models and ensembles continue to keep a long wave trough over our area through the weekend. Of course, the airmass will undoubtedly modify bringing a slight warming trend Wed/Thus but 70s may not return until sometime next week. Besides this, the GFS and ECMWF show another disturbance rotating through the trough come Friday. This system will also be relatively cold and will subsequently be lacking any substantial moisture. However, the main impact will

likely be breezy conditions and light snow above 4000 ft if in fact it does materialize.

&&

.AVIATION...

South-Central Arizona including KPHX, KIWA, and SDL:

Breezy conditions will develop this afternoon and persist overnight ahead of an approaching low pressure system. Southwesterly gusts to 20 kt will be possible, particularly at KPHX. Low-level moisture will also be on the increase, leading to the development of stratocu with bases around 6k ft as early as Sunday afternoon. Scattered showers are also expected to develop, mainly after 00z Monday and across the higher terrain north and east of Phoenix. Across the Phoenix area, precipitation will be most likely at KSDL and a mention of VCSH was included in the TAF.

Southeast California/Southwest Arizona including KIPL and KBLH:

Breezy to windy conditions will develop ahead of an approaching low pressure system. Although gusts to 25 kt will be possible during the afternoon, latest model guidance suggests that winds will subside somewhat overnight, particularly at KIPL.

Aviation Discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Tuesday through Saturday:

A cold front moving through on Monday will bring unseasonably cold weather to the area on Tuesday with highs 15 degrees below average. After this, temperatures will begin a gradual warming trend. Very dry air will exist over our area from Tuesday through at least Thursday with daytime humidity minimums in the teens and single digits. Generally poor overnight recoveries are expected however winds are forecast to be rather light during this period. A weak weather disturbance may move through on Friday bringing a slight chance of precipitation but accumulations will amount to little if any.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

**See Last page for San Diego Deserts**

┌  
464

WWUS76 KSGX 182048  
NPWSGX

URGENT - WEATHER MESSAGE  
National Weather Service San Diego CA  
1248 PM PST Sun Feb 18 2018

...AREAS OF STRONG GUSTY WINDS FOR THIS AFTERNOON THROUGH  
MONDAY...

...AREAS OF NEAR FREEZING TEMPERATURES WITH AREAS OF  
FROST FOR MONDAY NIGHT AND TUESDAY NIGHT IN THE VALLEYS...

.A cold low pressure system from the north will bring periods of  
strong and gusty westerly winds through Monday. As the storm  
moves east, cold nights will follow, with areas of frost and  
freezing conditions for portions of the valleys and through the  
San Geronio Pass.

CAZ048-190600-  
/O.CON.KSGX.FZ.W.0001.180220T0600Z-180220T1700Z/  
/O.CON.KSGX.FR.Y.0003.180221T0600Z-180221T1600Z/  
San Bernardino and Riverside County Valleys-The Inland Empire-  
Including the cities of Riverside, San Bernardino, Ontario,  
Moreno Valley, Fontana, Rancho Cucamonga, and Corona  
1248 PM PST Sun Feb 18 2018

...FREEZE WARNING REMAINS IN EFFECT FROM 10 PM MONDAY TO 9 AM PST  
TUESDAY...

...FROST ADVISORY REMAINS IN EFFECT FROM 10 PM TUESDAY TO 8 AM  
PST WEDNESDAY...

\* Temperature...Falling into the upper 20s to mid 30s for late  
Monday night into Tuesday morning...and into the 30s for late  
Tuesday night into Wednesday morning.

\* Duration...Several hours of temperatures sufficient for frost  
each night with 4 to 6 hours of temperatures near or below  
freezing in the colder locations For late Monday night into  
Tuesday morning..

\* Location...Coldest temperatures in low-lying, wind-sheltered  
areas...especially in southern and eastern portions of the  
Inland Empire.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Freeze Warning means sub-freezing temperatures are imminent or  
highly likely. These conditions will kill crops and other  
sensitive vegetation.

A Frost Advisory means that widespread frost is expected.  
Sensitive outdoor plants may be killed if left uncovered.

&amp;&amp;

\$\$

CAZ060-190600-

/O.CON.KSGX.HW.W.0003.180218T2200Z-180220T0200Z/

Apple and Lucerne Valleys-

Including the cities of Victorville, Hesperia, and Apple Valley

1248 PM PST Sun Feb 18 2018

...HIGH WIND WARNING REMAINS IN EFFECT UNTIL 6 PM PST MONDAY...

\* Winds...Southwest to west winds 20 to 30 mph with gusts to 50 mph. Local gusts to 65 mph.

\* Timing...Winds strengthening today with the strongest winds late this afternoon through late tonight.

\* Location...Strongest winds near the foothills of the mountains.

\* Visibility...Reduced in blowing dust and sand at times.

\* Impacts...Strong winds will make travel difficult for high-profile vehicles. Blowing dust and sand may reduce visibility to near-zero in a few locations

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A High Wind Warning means a hazardous high wind event is expected or occurring. Sustained wind speeds of at least 40 mph or gusts of 58 mph or more can lead to property damage.

&amp;&amp;

\$\$

CAZ065-190600-

/O.CON.KSGX.WI.Y.0006.180218T2200Z-180220T0200Z/

/O.CON.KSGX.FR.Y.0002.180220T0600Z-180220T1700Z/

San Gorgonio Pass Near Banning-

Including the cities of Banning and Desert Hot Springs

1248 PM PST Sun Feb 18 2018

...WIND ADVISORY REMAINS IN EFFECT UNTIL 6 PM PST MONDAY...

...FROST ADVISORY REMAINS IN EFFECT FROM 10 PM MONDAY TO 9 AM PST TUESDAY...

\* Winds...Areas of west winds 25 to 35 mph with gusts to 55 mph. Isolated gusts to 70 mph in the northern Coachella Valley below the San Gorgonio Pass for this afternoon through Monday.

\* Temperatures...Falling into the lower to mid 30s for late Monday night into Tuesday morning with areas of frost



**February 19, 2018 Exceptional Event, Imperial County****Appendix A**

possible.

- \* Duration...Several hours with temperatures sufficient for frost late Monday night into Tuesday morning..
- \* Impacts...Strong winds will make travel difficult for high-profile vehicles. Sensitive outdoor plants may be killed if left uncovered.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that winds of 35 mph are expected. Winds this strong can make driving difficult...especially for high profile vehicles. Use extra caution.

A Frost Advisory means that widespread frost is expected. Sensitive outdoor plants may be killed if left uncovered.

&&

\$\$

CAZ050-190600-

/O.CON.KSGX.WI.Y.0006.180219T1600Z-180220T0200Z/

/O.CON.KSGX.FR.Y.0002.180220T0600Z-180220T1700Z/

San Diego County Valleys-

Including the cities of Escondido, El Cajon, San Marcos, La Mesa, Santee, and Poway

1248 PM PST Sun Feb 18 2018

...WIND ADVISORY REMAINS IN EFFECT FROM 8 AM TO 6 PM PST MONDAY...

...FROST ADVISORY REMAINS IN EFFECT FROM 10 PM MONDAY TO 9 AM PST TUESDAY...

- \* Winds...Areas of winds west 15 to 25 mph with gusts to 40 mph on Monday.
- \* Temperatures...Falling into the lower to mid 30s for late Monday night into Tuesday morning with areas of frost possible. Coldest temperatures in the inland valleys near the foothills of the mountains.
- \* Impacts...Strong winds will make travel difficult for high-profile vehicles. Watch for broken tree limbs and downed palm fronds. Sensitive outdoor plants may be killed if left uncovered.
- \* Outlook...Patchy frost is also possible late Tuesday night into Wednesday morning...mainly for the inland valleys near the foothills of the mountains.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that winds of 35 mph are expected. Winds

**February 19, 2018 Exceptional Event, Imperial County****Appendix A**

this strong can make driving difficult...especially for high profile vehicles. Use extra caution.

A Frost Advisory means that widespread frost is expected. Sensitive outdoor plants may be killed if left uncovered.

&&

\$\$

CAZ061-062-190600-

/O.CON.KSGX.WI.Y.0006.180218T2200Z-180220T0200Z/

Coachella Valley-San Diego County Deserts-

Including the cities of Indio, Palm Springs, Cathedral City, Palm Desert, Palm Desert Country, La Quinta, Coachella, and Borrego Springs

1248 PM PST Sun Feb 18 2018

...WIND ADVISORY REMAINS IN EFFECT UNTIL 6 PM PST MONDAY...

\* Winds...Areas of northwest to west winds 25 to 35 mph with gusts to 55 mph and isolated gusts to 60 to 70 mph.

\* Location...Strongest gusts near the mountains...and in the Coachella Valley north and east of Interstate 10.

\* Impacts...Strong winds will make travel difficult for high-profile vehicles. Blowing dust and sand may reduce visibility to near zero in a few locations.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that winds of 35 mph are expected. Winds this strong can make driving difficult...especially for high profile vehicles. Use extra caution.

&&

\$\$

CAZ043-190600-

/O.CON.KSGX.WI.Y.0006.180219T1600Z-180220T0200Z/

San Diego County Coastal Areas-

Including the cities of Vista, Carlsbad, Encinitas, Chula Vista, National City, and San Diego

1248 PM PST Sun Feb 18 2018

...WIND ADVISORY REMAINS IN EFFECT FROM 8 AM TO 6 PM PST MONDAY...

\* Winds...Areas of winds west 15 to 25 mph with gusts to 40 mph.

\* Location...Strongest gusts to 45 mph near the coast.

\* Impacts...Strong winds will make travel difficult for high-

「  
294  
FXUS66 KSGX 182150  
AFDSGX

Area Forecast Discussion  
National Weather Service San Diego CA  
150 PM PST Sun Feb 18 2018

.SYNOPSIS...

Onshore flow will be increasing tonight, becoming strong and gusty over the mountains and deserts as a cold low pressure trough drops south into the Great Basin. Scattered, light rain and snow showers will pop over and west of the mountains late tonight into Monday as the marine layer builds. Expect the coldest days of the winter so far on Monday and Tuesday. Dry and a little warmer for Wednesday and Thursday. Then cooler again into Friday, with a chance for some more scattered showers as another cold low pressure system drops into the Great Basin from the north. Dry and a little warmer into next weekend as temperatures edge back toward average.

&&

.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE...  
SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO  
COUNTIES...

Just a few mid-level clouds were visible in satellite imagery over SoCal at midday, otherwise it was clear. Temperatures were running 5 to 10 degrees lower than yesterday. A rapid acceleration is the surface pressure gradient to 14 MBS KSAN to SW NV portends the strong winds to come overnight. But as of Noon PST...Peak wind gusts over 50 MPH were confined to the San Geronio Pass, and Volcan Mtn in San Diego County. The sfc gradient will maximize this evening and increasing winds aloft overnight will combine to create the strongest gust potential, first over northern areas of the CWA, then south across San Diego County. A secondary wind max is likely on the highest elevations of the San Diego County Mts on Monday as the powerful upper-level jet core traverses the area. A few peak gusts of around 70 MPH may be observed in these areas.

A longwave trough will dive into the Great Basin on Monday, grazing SoCal with strong onshore winds and scattered light precipitation. It will also bring the coldest air of the season, plunging maximum temps on Monday into the 15 to 20 degrees below normal range. given the extended period of well above normal temps this winter, it will be a profound change.

This wave is actually the beginning of a more sustained cooler weather pattern for the SoCal as the longwave is maintained for sometime in the model runs. Various shorter wavelength disturbances will periodically drop into the longwave, creating gusty onshore flow over the coastal waters, mts and deserts, and chances for light precip. So for the foreseeable future, daytime temperatures will

**February 19, 2018 Exceptional Event, Imperial County**

be mostly below average.

A variety of Warnings and Advisories are in effect from frost/freeze to wind and winter conditions. Please visit our webpage for more detail on all of these. Of most significance will be the strong westerly winds late tonight into Monday. Gusts over 70 MPH are expected on the upper desert slopes and ridge tops, while on the desert floor, it will be breezy, but potentially damaging gusts look to be more isolated and near the foothills late tonight into Monday morning. Windy conditions are also expected for coastal San Diego County on Monday. Precipitation will be light and scattered, but it will be cold enough so that some light snow accumulations are forecast above 4000 FT. Freezing conditions on the passes, could create a hazard to travelers.

As this system moves east, another, weaker trough slips south across the area midweek with little weather. Temps will moderate some, then a stronger disturbance drops south for Friday. This one could generate more light showers, and gusty winds over the mts/deserts/coastal waters. Slightly warmer and dry into the weekend, then both the 12Z GFS/ECMWF runs are advertising a stronger system early next week. Who knows, we may be able to salvage some precip before the end of the month.

&&

.AVIATION...

182100Z...Mostly SCT-BKN clouds at or abv 6000 ft MSL and unrestricted vis will continue through this afternoon. Low clouds currently northwest of San Clemente Island not likely to impact TAF sites before 00Z Mon. Low clouds will increase rapidly after 02Z west of the mtns, with bases mostly 2000-3000 ft MSL, obscuring higher terrain. Timing of cigs blo 3000 ft MSL at TAF sites is uncertain. -SHRA could develop late tonight through Monday morning. Clearing at coastal TAF sites could occur between 12Z and 14Z Monday, but low clouds inland will continue to obscure higher terrain through 18Z Mon.

Southwest to west winds 25 to 35 mph with gusts to 55 mph will develop over mtn ridges this evening, and continue through Monday afternoon. The winds will produce strong up/downdrafts and LLWS over and east of the mtns. Strong and gusty southwest to west winds could also impact TAF sites in San Diego County Monday morning through Monday afternoon.

&&

.MARINE...

No hazardous weather is expected through this afternoon. West-northwest winds will increase to 20-30 kt tonight and continue through Monday night, with gusts 35 to 40 kt possible in the outer waters Monday morning. Combined seas of 9-12 ft with steep waves are likely through the period. Conditions will improve Tuesday.

&amp;&amp;

.SKYWARN...

Skywarn activation is not requested. However weather spotters are encouraged to report significant weather conditions.

&amp;&amp;

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...Winter Weather Advisory from 6 PM this evening to 10 PM PST Monday for Riverside County Mountains-San Bernardino County Mountains-San Diego County Mountains.

Wind Advisory from 2 PM this afternoon to 6 PM PST Monday for Coachella Valley-San Diego County Deserts-San Gorgonio Pass Near Banning.

High Wind Warning from 2 PM this afternoon to 6 PM PST Monday for Apple and Lucerne Valleys.

Frost Advisory from 10 PM Monday to 9 AM PST Tuesday for San Diego County Valleys-San Gorgonio Pass Near Banning.

Wind Advisory from 8 AM to 6 PM PST Monday for San Diego County Coastal Areas-San Diego County Valleys.

Frost Advisory from 10 PM Tuesday to 8 AM PST Wednesday for San Bernardino and Riverside County Valleys-The Inland Empire.

Freeze Warning from 10 PM Monday to 9 AM PST Tuesday for San Bernardino and Riverside County Valleys-The Inland Empire.

PZ...Gale Warning from 10 PM this evening to 6 AM PST Tuesday for Waters from San Mateo point to the Mexican Border Extending 30 to 60 nm out including San Clemente Island.

Small Craft Advisory from 10 PM this evening to 6 AM PST Tuesday for Coastal Waters from San Mateo Point to the Mexican Border and out to 30 nm.

&amp;&amp;

\$\$

PUBLIC...jad

AVIATION/MARINE...PG

728  
WWUS75 KPSR 182106  
NPWPSR

URGENT - WEATHER MESSAGE  
National Weather Service Phoenix AZ  
206 PM MST Sun Feb 18 2018

CAZ562-566-191045-  
/O.CON.KPSR.WI.Y.0004.180218T2200Z-180220T0400Z/  
Imperial County Southwest-Imperial County West-  
Including the cities of Mountain Spring, Coolidge Springs,  
Salton City, Winona, Coyote Wells, Ocotillo, and Plaster City  
106 PM PST Sun Feb 18 2018

...WIND ADVISORY REMAINS IN EFFECT UNTIL 8 PM PST MONDAY...

\* AFFECTED AREA...Southwest Imperial County including Interstate  
8

\* TIMING...This afternoon through Monday evening

\* WINDS...West winds 30 to 40 mph with gusts up to 50 mph

\* IMPACTS...Strong winds in far southwestern Imperial County  
will create difficult and hazardous driving conditions,  
especially for high profile vehicles. Areas of blowing dusts  
may also lead to sharply reduced visibilities.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between  
30 and 40 mph are expected, or wind gusts of between 40 and  
58 mph. Winds this strong can make driving difficult, especially  
for high profile vehicles. In addition, strong winds over desert  
areas could result in briefly lowered visibilities to well under  
a mile at times in blowing dust or blowing sand. Use extra  
caution.

&&

\$\$

CAZ560-191045-  
/O.CON.KPSR.WI.Y.0004.180218T2200Z-180220T0400Z/  
Joshua Tree NP West-  
Including the cities of Cottonwood Visitor and Lost Horse-Keys  
Village  
106 PM PST Sun Feb 18 2018

...WIND ADVISORY REMAINS IN EFFECT UNTIL 8 PM PST MONDAY...

\* AFFECTED AREA...Joshua Tree National Park

**February 19, 2018 Exceptional Event, Imperial County****Appendix A**

- \* TIMING...This afternoon through Monday evening
- \* WINDS...West winds 25 to 35 mph with gusts up to 45 mph.
- \* IMPACTS...Strong winds in Joshua Tree National Park will create difficult and hazardous driving conditions, especially for high profile vehicles. Areas of blowing dusts may also lead to sharply reduced visibilities.

**PRECAUTIONARY/PREPAREDNESS ACTIONS...**

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

&amp;&amp;

\$\$

CAZ563>565-567-568-191045-  
/O.CON.KPSR.WI.Y.0004.180219T1900Z-180220T0400Z/  
Salton Sea-Chuckwalla Mountains-Imperial County Southeast-  
Imperial Valley-Chiriaco Summit-  
Including the cities of Desert Shores,  
Imperial Hot Mineral Springs, Winterhaven, El Centro, Calexico,  
Alamorio, Brawley, and Chiriaco Summit  
106 PM PST Sun Feb 18 2018

...WIND ADVISORY REMAINS IN EFFECT FROM 11 AM TO 8 PM PST  
MONDAY...

- \* AFFECTED AREA...Imperial County including the city of El Centro.
- \* TIMING...Late Monday morning through Monday evening
- \* WINDS...West winds 20 to 30 mph with gusts up to 40 mph
- \* IMPACTS...Windy conditions over Imperial County will create difficult and hazardous driving conditions, especially for high profile vehicles. Areas of blowing dusts may also lead to sharply reduced visibilities.

**PRECAUTIONARY/PREPAREDNESS ACTIONS...**

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert

☐

772

FXUS65 KPSR 182110

AFDPSR

Area Forecast Discussion

National Weather Service Phoenix AZ

210 PM MST Sun Feb 18 2018

.SYNOPSIS...

Temperatures will cool drastically the next several days as a low pressure system drops southward through the southern Rockies and Desert Southwest. Shower chances will increase tonight and primarily be limited to central and eastern Arizona. As winds become very breezy Monday, light rain and snow chances will continue into early Tuesday morning. In the wake of the low pressure system, very cool weather will persist only warming back to near average over the weekend.

&amp;&amp;

.DISCUSSION...

Modest heights falls have spread into the region this afternoon ahead of a deep PV anomaly digging towards the Great Basin. 12Z sounding data showed H5 heights already falling 4-8dm under growing cyclonic flow and ascent. Mid/upper moisture continues to stream into the eastern half of Arizona and objective analysis suggests overall PWATs in a 0.50-0.75 inch range (certainly much higher than average for mid-February, but not unprecedented like the moisture surge last week). This cyclonic ascent and moisture advection is evidenced in satellite imagery of standing wave clouds and rapidly forming midlevel deck through the eastern third of the CWA.

Essentially all 12Z model output indicates increased ascent enveloping the forecast area tonight as height falls become more pronounced; and a very favorable juxtaposition of orographics and synoptic ascent will yield excellent chances of light showers from the eastern fringes of the Phoenix metro into higher elevations. A prevalent deep, moist flow should keep this process sustained into the daylight hours Monday, though ensemble means forecast total precipitation only on the order of a half inch at higher elevations (and more towards 1/10th of an inch or less at lower elevations). While the cold core will lag the moisture axis somewhat, minimal instability and convergence along a pre-frontal trough/pseudo dryline along with slantwise lift could release enough energy for a few rouge deep convective cells over Gila County.

The larger impact over the next 36 hours may be gusty winds



producing blowing dust and difficult driving conditions - especially through SE California. Strong southwest flow over the San Diego mountains along with approaching robust height falls should promote mountain rotors into the far western portions of Imperial County.

The larger synoptic gradient will tighten Monday along the aforementioned pre-frontal trough and ahead of the true cold front surging south towards the forecast area. Height falls and diurnal timing will promote deep mixing of higher momentum air, though rather extensive cloud cover over the eastern half of the CWA may hamper better mixing. Regardless, blowing dust seems likely through the western half of the CWA, and only recent beneficial rain in Pinal County may keep dust problems negligible in this area.

The primary vorticity center and trough base/cold core will descend into southern Nevada/Utah on Tuesday bringing the coolest airmass of the winter into the Southwest. Both midtropospheric heights and temperatures will fall below a 2-3 normalized standard deviation range and near minimums for this time of year. Despite sunny conditions, Tuesday will almost assuredly be the coldest day this winter. 850mb temperatures will only reach around 0C with 700mb readings near -15C, which should easily translate into surface high temperatures only in the lower/mid 50s! This cold airmass may also bring about freezing overnight temperatures for many outlying suburbs/rural communities of central Arizona, and Wednesday morning appears to have many sheltered areas in a 28-32F range.

Models and ensembles continue to keep a longwave trough over our area through the weekend. In fact, model trends suggest several shortwaves diving into the trough position reinforcing lower heights/thicknesses Wednesday and Thursday. The airmass will undoubtedly modify slightly, however heights may not rebound as quickly as previously thought. Thus, have continued a trend of weighting forecast temperatures towards raw guidance consensus and highs may not even reach 60F Wednesday and struggle into the lower/middle 60s Thursday.

The GFS and ECMWF show a slightly stronger disturbance rotating through the trough Friday though uncertainty with respect to the depth of this system is rather moderate. This system will be relatively cold and in all likelihood will subsequently be lacking any substantial moisture. However, the main impact will likely be breezy conditions, a few showers, and possibly light snow above 4000ft, if in fact it does materialize.

&&

.AVIATION...

South-Central Arizona including KPHX, KIWA, and SDL:

Breezy conditions will develop this afternoon and persist overnight

ahead of an approaching low pressure system. Southwesterly gusts to 20 kt will be possible, particularly at KPHX. Stronger winds are anticipated on Monday with some gusts to 30 kts during the afternoon.

SCT to BKN strato-cu will continue to affect the Phoenix area through Monday with decks mostly between 6-9K ft. Scattered showers are also expected to develop across the high terrain north and east of Phoenix, mainly late tonight and on Monday. Can't completely rule out a shower affecting an area terminal on Monday, but chances are too low to mention in TAFs.

Southeast California/Southwest Arizona including KIPL and KBLH: Breezy to windy conditions will affect the area through Monday with gusts to 25 kt this afternoon/evening and 30-35 kts on Monday. Some blowing dust may impact area terminals with best chances on Monday, but will hold off on mentioning any restricted visibilities in TAFs.

&&

.FIRE WEATHER...

Tuesday through Saturday:

A cold front moving through on Monday will bring unseasonably cold weather to the area on Tuesday with highs 15 degrees below average. After this, temperatures will begin a gradual warming trend. Very dry air will exist over our area from Tuesday through at least Thursday with daytime humidity minimums in the teens and single digits. Generally poor overnight recoveries are expected however winds are forecast to be rather light during this period. A weak weather disturbance may move through on Friday bringing a slight chance of precipitation but accumulations will amount to little if any.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...Wind Advisory from 2 PM this afternoon to 8 PM PST Monday for CAZ560-562-566.

Wind Advisory from 11 AM to 8 PM PST Monday for CAZ563>565-567-568.



965

FXUS65 KPSR 190238

AFDPSR

Area Forecast Discussion

National Weather Service Phoenix AZ

738 PM MST Sun Feb 18 2018

UPDATE...Updated Aviation Discussion.

&amp;&amp;

.SYNOPSIS...

Temperatures will cool drastically the next several days as a low pressure system drops southward through the southern Rockies and Desert Southwest. Shower chances will increase tonight and primarily be limited to central and eastern Arizona. As winds become very breezy Monday, light rain and snow chances will continue into early Tuesday morning. In the wake of the low pressure system, very cool weather will persist only warming back to near average over the weekend.

&amp;&amp;

.DISCUSSION...

Modest heights falls have spread into the region this afternoon ahead of a deep PV anomaly digging towards the Great Basin. 12Z sounding data showed H5 heights already falling 4-8dm under growing cyclonic flow and ascent. Mid/upper moisture continues to stream into the eastern half of Arizona and objective analysis suggests overall PWATs in a 0.50-0.75 inch range (certainly much higher than average for mid-February, but not unprecedented like the moisture surge last week). This cyclonic ascent and moisture advection is evidenced in satellite imagery of standing wave clouds and rapidly forming midlevel deck through the eastern third of the CWA.

Essentially all 12Z model output indicates increased ascent enveloping the forecast area tonight as height falls become more pronounced; and a very favorable juxtaposition of orographics and synoptic ascent will yield excellent chances of light showers from the eastern fringes of the Phoenix metro into higher elevations. A prevalent deep, moist flow should keep this process sustained into the daylight hours Monday, though ensemble means forecast total precipitation only on the order of a half inch at higher elevations (and more towards 1/10th of an inch or less at lower elevations). While the cold core will lag the moisture axis somewhat, minimal instability and convergence along a pre-frontal trough/pseudo

dryline along with slantwise lift could release enough energy for a few rouge deep convective cells over Gila County.

The larger impact over the next 36 hours may be gusty winds producing blowing dust and difficult driving conditions - especially through SE California. Strong southwest flow over the San Diego mountains along with approaching robust height falls should promote mountain rotors into the far western portions of Imperial County. The larger synoptic gradient will tighten Monday along the aforementioned pre-frontal trough and ahead of the true cold front surging south towards the forecast area. Height falls and diurnal timing will promote deep mixing of higher momentum air, though rather extensive cloud cover over the eastern half of the CWA may hamper better mixing. Regardless, blowing dust seems likely through the western half of the CWA, and only recent beneficial rain in Pinal County may keep dust problems negligible in this area.

The primary vorticity center and trough base/cold core will descend into southern Nevada/Utah on Tuesday bringing the coolest airmass of the winter into the Southwest. Both midtropospheric heights and temperatures will fall below a 2-3 normalized standard deviation range and near minimums for this time of year. Despite sunny conditions, Tuesday will almost assuredly be the coldest day this winter. 850mb temperatures will only reach around 0C with 700mb readings near -15C, which should easily translate into surface high temperatures only in the lower/mid 50s! This cold airmass may also bring about freezing overnight temperatures for many outlying suburbs/rural communities of central Arizona, and Wednesday morning appears to have many sheltered areas in a 28-32F range.

Models and ensembles continue to keep a longwave trough over our area through the weekend. In fact, model trends suggest several shortwaves diving into the trough position reinforcing lower heights/thicknesses Wednesday and Thursday. The airmass will undoubtedly modify slightly, however heights may not rebound as quickly as previously thought. Thus, have continued a trend of weighting forecast temperatures towards raw guidance consensus and highs may not even reach 60F Wednesday and struggle into the lower/middle 60s Thursday.

The GFS and ECMWF show a slightly stronger disturbance rotating through the trough Friday though uncertainty with respect to the depth of this system is rather moderate. This system will be relatively cold and in all likelihood will subsequently be lacking any substantial moisture. However, the main impact will likely be breezy conditions, a few showers, and possibly light snow above 4000ft, if in fact it does materialize.

&&

**.AVIATION...**

South-Central Arizona including KPHX, KIWA, and KSDL:

With a cold front approaching from the north and moving through the area on Monday expect mainly southerly to southwesterly winds tonight near 5-10kt. Then very breezy to windy conditions will develop Monday morning from 15-18Z with southwesterly winds gusting up to 20-24kt. Some stronger wind gusts may also reach as high as 30kt during the afternoon. Skies will remain partly to mostly cloudy with SCT-BKN low clouds from 5-9k along with a slight chance of mainly light rain showers in the vicinity of some terminals by early to mid morning and lasting through the afternoon.

Southeast California/Southwest Arizona including KIPL and KBLH:

Expect some breezy to very breezy conditions tonight with westerly winds gusting to 18-24kt. By Monday morning windy conditions will predominate with strong wind gusts of 25-35kt. Some areas of blowing dust can not be ruled out for Monday but will hold off mentioning any reduced visibilities and dust in the TAFs.

Aviation Discussion not updated for amended TAFs.

&&

**.FIRE WEATHER...**

Tuesday through Saturday:

A cold front moving through on Monday will bring unseasonably cold weather to the area on Tuesday with highs 15 degrees below average. After this, temperatures will begin a gradual warming trend. Very dry air will exist over our area from Tuesday through at least Thursday with daytime humidity minimums in the teens and single digits. Generally poor overnight recoveries are expected however winds are forecast to be rather light during this period. A weak weather disturbance may move through on Friday bringing a slight chance of precipitation but accumulations will amount to little if any.

&&

**.SPOTTER INFORMATION STATEMENT...**

Spotters should follow standard reporting procedures.

&&

**.PSR WATCHES/WARNINGS/ADVISORIES...**

AZ...None.

CA...Wind Advisory until 8 PM PST Monday for CAZ560-562-566.

Wind Advisory from 11 AM to 8 PM PST Monday for CAZ563>565-567-568.

&&

\$\$

Visit us on Facebook, Twitter, and at [weather.gov/phoenix](http://weather.gov/phoenix)

DISCUSSION...MO/Wilson

AVIATION...Sawtelle

FIRE WEATHER...Wilson

# IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

## Department of Agronomy

716 Farm House Ln

Ames, IA 50011

[akrherz@iastate.edu](mailto:akrherz@iastate.edu)

515-294-5978 phone



Facebook



Twitter



Github



YouTube



RSS

7  
747  
FXUS66 KSGX 190548 AAA  
AFDSGX

Area Forecast Discussion  
National Weather Service San Diego CA  
945 PM PST Sun Feb 18 2018

.SYNOPSIS...

Onshore flow will be increasing tonight, becoming strong and gusty over the mountains and deserts as a cold low pressure trough drops south into the Great Basin. Scattered, light rain and snow showers will pop over and west of the mountains late tonight into Monday as the marine layer builds. Expect the coldest days of the winter so far on Monday and Tuesday. Dry and a little warmer for Wednesday and Thursday. Then cooler again into Friday, with a chance for some more scattered showers as another cold low pressure system drops into the Great Basin from the north. Dry and a little warmer into next weekend as temperatures edge back toward average.

&&

.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE...  
SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO  
COUNTIES...

...Evening Update...

Rain showers are developing offshore, likely to move onshore after 10 pm. Most of this activity will be quite light as it moves inland through the night. Snow showers will be likely in the mountains late tonight but again on the light side. With temperatures already down into the mid 40s in the high desert, there is a slight chance of seeing some snow flurries by Monday morning there as well once the cooler air is ushered in by the vigorous trough which will be dropping through California overnight. No significant changes were needed to the forecast this evening.

...Remainder of previous discussion...

A longwave trough will dive into the Great Basin on Monday, grazing SoCal with strong onshore winds and scattered light precipitation. It will also bring the coldest air of the season, plunging maximum temps on Monday into the 15 to 20 degrees below normal range. given the extended period of well above normal temps this winter, it will be a profound change.

This wave is actually the beginning of a more sustained cooler weather pattern for the SoCal as the longwave is maintained for sometime in the model runs. Various shorter wavelength disturbances will periodically drop into the longwave, creating gusty onshore flow over the coastal waters, mts and deserts, and chances for light precip. So for the foreseeable future, daytime temperatures will

**February 19, 2018 Exceptional Event, Imperial County**

be mostly below average.

A variety of Warnings and Advisories are in effect from frost/freeze to wind and winter conditions. Please visit our webpage for more detail on all of these. Of most significance will be the strong westerly winds late tonight into Monday. Gusts over 70 MPH are expected on the upper desert slopes and ridge tops, while on the desert floor, it will be breezy, but potentially damaging gusts look to be more isolated and near the foothills late tonight into Monday morning. Windy conditions are also expected for coastal San Diego County on Monday. Precipitation will be light and scattered, but it will be cold enough so that some light snow accumulations are forecast above 4000 FT. Freezing conditions on the passes, could create a hazard to travelers.

As this system moves east, another, weaker trough slips south across the area midweek with little weather. Temps will moderate some, then a stronger disturbance drops south for Friday. This one could generate more light showers, and gusty winds over the mts/deserts/coastal waters. Slightly warmer and dry into the weekend, then both the 12Z GFS/ECMWF runs are advertising a stronger system early next week. Who knows, we may be able to salvage some precip before the end of the month.

&&

.AVIATION...

190515Z...Mostly BKN-OVC clouds with bases 2000-4000 ft MSL will prevail through Monday afternoon from the mountains to the coast, with scattered -SHRA, most frequent 07Z-13Z, plus scattered -SHSN in the mountains. Higher terrain will be obscured, with tops to 8000 ft MSL possible, but at TAF sites, most vis will remain above 5 miles. By Monday evening, most areas will have SCT clouds, generally above 3000 ft MSL.

Southwest to west winds 25-35 kt with gusts to 55 kt will continue to spread over the mountain crests and desert mountain slopes tonight with these strong winds continuing through Monday afternoon. Areas of west winds 20-30 kt will occur near the coast Monday and will likely bring gusts around 30 kt at KSAN at times.

&&

.MARINE...

West-northwest winds will increase to 20-30 kt tonight and continue through Monday night, with gusts 35 to 40 kt possible in the outer waters Monday morning. Combined seas of 9-13 ft with steep waves are likely Monday through Monday evening in the outer waters with 7-11 ft in the inner waters. Conditions will improve Tuesday.

&&

.SKYWARN...

Skywarn activation is not requested. However weather spotters are



**February 19, 2018 Exceptional Event, Imperial County**

encouraged to report significant weather conditions.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...Winter Weather Advisory from 6 PM this evening to 10 PM PST Monday for Riverside County Mountains-San Bernardino County Mountains-San Diego County Mountains.

Wind Advisory from 2 PM this afternoon to 6 PM PST Monday for Coachella Valley-San Diego County Deserts-San Gorgonio Pass Near Banning.

High Wind Warning from 2 PM this afternoon to 6 PM PST Monday for Apple and Lucerne Valleys.

Frost Advisory from 10 PM Monday to 9 AM PST Tuesday for San Diego County Valleys-San Gorgonio Pass Near Banning.

Wind Advisory from 8 AM to 6 PM PST Monday for San Diego County Coastal Areas-San Diego County Valleys.

Frost Advisory from 10 PM Tuesday to 8 AM PST Wednesday for San Bernardino and Riverside County Valleys-The Inland Empire.

Freeze Warning from 10 PM Monday to 9 AM PST Tuesday for San Bernardino and Riverside County Valleys-The Inland Empire.

PZ...Gale Warning from 10 PM this evening to 6 AM PST Tuesday for Waters from San Mateo point to the Mexican Border Extending 30 to 60 nm out including San Clemente Island.

Small Craft Advisory from 10 PM this evening to 6 AM PST Tuesday for Coastal Waters from San Mateo Point to the Mexican Border and out to 30 nm.

&&

\$\$

PUBLIC...jad/jmb  
AVIATION/MARINE...Maxwell

739

## See last page for San Diego Deserts

WWUS76 KSGX 190557  
NPWSGX

### URGENT - WEATHER MESSAGE

National Weather Service San Diego CA  
957 PM PST Sun Feb 18 2018

...STRONG WINDS THROUGH MONDAY...  
...NEAR FREEZING TEMPERATURES IN THE VALLEYS WITH AREAS OF FROST  
MONDAY NIGHT AND TUESDAY NIGHT...

.A cold low pressure system from the north will bring periods of strong and gusty westerly winds through Monday. As the storm moves east, cold nights will follow, with areas of frost in the valleys and the San Geronio Pass.

CAZ048-191400-

/O.CON.KSGX.FZ.W.0001.180220T0600Z-180220T1700Z/

/O.CON.KSGX.FR.Y.0003.180221T0600Z-180221T1600Z/

San Bernardino and Riverside County Valleys-The Inland Empire-  
Including the cities of Riverside, San Bernardino, Ontario,  
Moreno Valley, Fontana, Rancho Cucamonga, and Corona  
957 PM PST Sun Feb 18 2018

...FREEZE WARNING REMAINS IN EFFECT FROM 10 PM MONDAY TO 9 AM PST  
TUESDAY...

...FROST ADVISORY REMAINS IN EFFECT FROM 10 PM TUESDAY TO 8 AM  
PST WEDNESDAY...

\* Temperature...Falling into the upper 20s to mid 30s Monday night  
into Tuesday morning...and in the 30s Tuesday night into  
Wednesday morning.

\* Duration...Several hours of temperatures sufficient for frost  
each night with 4 to 6 hours of near or below freezing  
conditions.

\* Location...Coldest temperatures in low-lying, wind-sheltered  
areas...especially in southern and eastern portions of the  
Inland Empire.

### PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Freeze Warning means sub-freezing temperatures are imminent or highly likely. These conditions will kill crops and other sensitive vegetation.

A Frost Advisory means that widespread frost is expected. Sensitive outdoor plants may be killed if left uncovered.

&&

**February 19, 2018 Exceptional Event, Imperial County****Appendix A**

\$\$

CAZ060-191400-

/O.CON.KSGX.HW.W.0003.000000T0000Z-180220T0200Z/

Apple and Lucerne Valleys-

Including the cities of Victorville, Hesperia, and Apple Valley

957 PM PST Sun Feb 18 2018

...HIGH WIND WARNING REMAINS IN EFFECT UNTIL 6 PM PST MONDAY...

\* Winds...Southwest to west winds 20 to 30 mph with occasional gusts up to 65 mph.

\* Timing/Location...Strongest winds overnight near the foothills of the mountains.

\* Impacts...Strong winds will make travel difficult for high-profile vehicles. Blowing dust and sand may reduce visibility to near-zero in a few locations

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A High Wind Warning means a hazardous high wind event is expected or occurring. Sustained wind speeds of at least 40 mph or gusts of 58 mph or more can lead to property damage.

&amp;&amp;

\$\$

CAZ065-191400-

/O.CON.KSGX.WI.Y.0006.000000T0000Z-180220T0200Z/

/O.CON.KSGX.FR.Y.0002.180220T0600Z-180220T1700Z/

San Gorgonio Pass Near Banning-

Including the cities of Banning and Desert Hot Springs

957 PM PST Sun Feb 18 2018

...WIND ADVISORY REMAINS IN EFFECT UNTIL 6 PM PST MONDAY...

...FROST ADVISORY REMAINS IN EFFECT FROM 10 PM MONDAY TO 9 AM PST TUESDAY...

\* Winds...Areas of west winds 25 to 35 mph with gusts to 55 mph. Isolated gusts to 70 mph in the northern Coachella Valley below the San Gorgonio Pass for this afternoon through Monday.

\* Temperatures...Falling into the lower to mid 30s for late Monday night into Tuesday morning with areas of frost possible.

\* Duration...Several hours with temperatures sufficient for frost late Monday night into Tuesday morning.

\* Impacts...Strong winds will make travel difficult for high-profile vehicles. Sensitive outdoor plants may be killed if

left uncovered.

#### PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that winds of 35 mph are expected. Winds this strong can make driving difficult...especially for high profile vehicles. Use extra caution.

A Frost Advisory means that widespread frost is expected. Sensitive outdoor plants may be killed if left uncovered.

&&

\$\$

CAZ050-191400-

/O.CON.KSGX.WI.Y.0006.180219T1600Z-180220T0200Z/

/O.CON.KSGX.FR.Y.0002.180220T0600Z-180220T1700Z/

San Diego County Valleys-

Including the cities of Escondido, El Cajon, San Marcos, La Mesa, Santee, and Poway

957 PM PST Sun Feb 18 2018

...WIND ADVISORY REMAINS IN EFFECT FROM 8 AM TO 6 PM PST MONDAY...

...FROST ADVISORY REMAINS IN EFFECT FROM 10 PM MONDAY TO 9 AM PST TUESDAY...

\* Winds...Areas of winds west 15 to 25 mph with gusts to 40 mph on Monday.

\* Temperatures...Falling into the lower to mid 30s for late Monday night into Tuesday morning with areas of frost possible. Coldest temperatures in the inland valleys near the foothills of the mountains.

\* Impacts...Strong winds will make travel difficult for high-profile vehicles. Watch for broken tree limbs and downed palm fronds. Sensitive outdoor plants may be killed if left uncovered.

\* Outlook...Patchy frost is also possible late Tuesday night into Wednesday morning...mainly for the inland valleys near the foothills of the mountains.

#### PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that winds of 35 mph are expected. Winds this strong can make driving difficult...especially for high profile vehicles. Use extra caution.

A Frost Advisory means that widespread frost is expected. Sensitive outdoor plants may be killed if left uncovered.

&&

\$\$

CAZ061-062-191400-

/O.CON.KSGX.WI.Y.0006.000000T0000Z-180220T0200Z/

Coachella Valley-San Diego County Deserts-

Including the cities of Indio, Palm Springs, Cathedral City,

Palm Desert, Palm Desert Country, La Quinta, Coachella,

and Borrego Springs

957 PM PST Sun Feb 18 2018

...WIND ADVISORY REMAINS IN EFFECT UNTIL 6 PM PST MONDAY...

\* Winds...Areas of northwest to west winds 25 to 35 mph with gusts to 55 mph and isolated gusts to 60 to 70 mph.

\* Location...Strongest gusts near the mountains...and in the Coachella Valley north and east of Interstate 10.

\* Impacts...Strong winds will make travel difficult for high-profile vehicles. Blowing dust and sand may reduce visibility to near zero in a few locations.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that winds of 35 mph are expected. Winds this strong can make driving difficult...especially for high profile vehicles. Use extra caution.

&amp;&amp;

\$\$

CAZ043-191400-

/O.CON.KSGX.WI.Y.0006.180219T1600Z-180220T0200Z/

San Diego County Coastal Areas-

Including the cities of Vista, Carlsbad, Encinitas, Chula Vista,

National City, and San Diego

957 PM PST Sun Feb 18 2018

...WIND ADVISORY REMAINS IN EFFECT FROM 8 AM TO 6 PM PST MONDAY...

\* Winds...Areas of winds west 15 to 25 mph with gusts to 40 mph.

\* Location...Strongest gusts to 45 mph near the coast.

\* Impacts...Strong winds will make travel difficult for high-profile vehicles. Watch for broken tree limbs and downed palm fronds.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that winds of 35 mph are expected. Winds this strong can make driving difficult...especially for high

☐

940

FXUS65 KPSR 191007

AFDPSR

Area Forecast Discussion

National Weather Service Phoenix AZ

307 AM MST Mon Feb 19 2018

.SYNOPSIS...

Temperatures will cool drastically today and Tuesday as a low pressure system drops southward through the Great Basin and into the Desert Southwest. Winds will become very breezy today with light rain and snow chances for the higher terrain through early Tuesday morning. In the wake of the low pressure system, very cool weather will persist only warming back to near average late this weekend.

&&

.DISCUSSION...

An upper level trough continues to dive southward this morning into the Great Basin and is currently bringing rain and snow showers across the West Coast. As this feature continues to move southward throughout the day, pressure gradients will continue to tighten ramping up the southwesterly flow across the desert southwest. This has already advected a slug of moisture into our area with PWs at 0.78 inches in Tucson's 00Z sounding, up roughly 0.4 inches from 24 hours ago.

The prominent orographic lift along with the higher moisture has allowed weakly convective showers to generate over the higher terrain north and east of Phoenix. Tucson's sounding indicates roughly 100 J/kg of mixed layer CAPE while model analysis suggests similar values are currently being observed over Gila County. Given that moisture and the strong southwesterly flow (i.e. orographic lift) will remain fairly steady through this afternoon, expecting showers to continue for the higher terrain until moisture shuts off behind the front early Tuesday morning.

The associated surface front with the aforementioned trough is currently stretched across southern Nevada but will continue to race down towards our CWA this morning. Models indicate this front will rip through Blythe around 8am this morning and into the Phoenix metro this afternoon/evening. While the front is expected to be dry for lower elevations, we are expecting some very

breezy/windy conditions with it. Consequently, we have a wind advisory for portions of SE California and also for the higher terrain of Gila County. For the Phoenix area, winds will not quite be at advisory criteria but gusts up to 30 mph could be realized. Winds are forecast to quickly settle down by late Monday night.

Behind the front, colder and much drier air will begin flooding into our area. By Tuesday afternoon, 850 mb temperatures will only be around 1-2 C over Phoenix which would translate into highs in the mid-50s! This is despite the fact that skies will be crystal clear under the late February sun. Believe it or not, this could match or best the coldest day so far this winter which was 57 degrees observed on December 21st. Temperatures are forecast to plummet Tuesday night after sunset with widespread 30s expected by Wednesday morning in the lower deserts. In fact, the coldest lower desert locations could briefly drop into the upper 20s during this period!

This long wave trough is forecast to stick around through at least Friday. However, the warm February sun will undoubtedly modify this airmass on both Wednesday and Thursday bringing a bit of warming each day. Yet another shortwave will rotate through this trough come Friday which looks to be relatively cold in nature but will not be packing much in the way of moisture. PWs are forecast to be around 0.5 inches at best but strong PVA forcing may accompany this trough if indeed it comes to fruition. Really, the main impact would be some breezy conditions along with some light snowfall above 4000 ft. However, there are still model disagreements with the ECMWF & GEFS offering a much drier solution than the GFS.

Quasi-zonal flow develops for the weekend and possibly into early next week bringing tranquil weather. This pattern would allow temperatures to gradually rise back to near normal while winds stay relatively light.

&&

.AVIATION...

South-Central Arizona including KPHX, KIWA, and KSDL:

With a cold front approaching from the north and moving through the area on Monday expect mainly southeasterly to southwesterly winds tonight near 5-10kt. Then very breezy to windy conditions will develop Monday morning from 15-18Z with southwesterly winds gusting up to 20-24kt. Some stronger wind gusts may also reach as high as 30kt during the afternoon. Skies will remain partly to mostly cloudy with SCT-BKN low clouds from 5-9k along with a slight chance of mainly light rain showers in the vicinity of some

terminals by early to mid morning and lasting through the afternoon.

Southeast California/Southwest Arizona including KIPL and KBLH:

Expect some breezy to very breezy conditions tonight with westerly winds gusting to 18-24kt. By Monday morning windy conditions will predominate with strong wind gusts of 25-35kt. Some areas of blowing dust can not be ruled out for Monday but will hold off mentioning any reduced visibilities and dust in the TAFs.

Aviation Discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Tuesday through Saturday:

A cold front moving through on Monday will bring unseasonably cold weather to the area on Tuesday with highs 15 degrees below average. After this, temperatures will begin a gradual warming trend. Very dry air will exist over our area from Tuesday through at least Thursday with daytime humidity minimums in the teens and single digits. Generally poor overnight recoveries are expected however winds are forecast to be rather light during this period. A weak weather disturbance may move through on Friday bringing a slight chance of precipitation but accumulations will amount to little if any.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...Wind Advisory from 11 AM this morning to 9 PM MST this evening for AZZ557-558-563.

CA...Wind Advisory until 8 PM PST this evening for CAZ560-562-566.

&&

\$\$

Visit us on Facebook, Twitter, and at [weather.gov/phoenix](http://weather.gov/phoenix)

DISCUSSION...Wilson



┌ See Last Pages

639

WWUS76 KSGX 191108

NPWSGX

URGENT - WEATHER MESSAGE

National Weather Service San Diego CA

308 AM PST Mon Feb 19 2018

...STRONG GUSTY WINDS TODAY...

...NEAR FREEZING TEMPERATURES IN THE VALLEYS WITH AREAS OF FROST  
TONIGHT AND TUESDAY NIGHT...

.A cold low pressure system over the western states will bring  
periods of strong and gusty west winds today. As the storm moves  
east, cold nights will follow, with areas of frost in the valleys  
and the San Geronimo Pass.

CAZ048-192230-

/O.CON.KSGX.FZ.W.0001.180220T0600Z-180220T1700Z/

/O.CON.KSGX.FR.Y.0003.180221T0600Z-180221T1600Z/

San Bernardino and Riverside County Valleys-The Inland Empire-

Including the cities of Riverside, San Bernardino, Ontario,

Moreno Valley, Fontana, Rancho Cucamonga, and Corona

308 AM PST Mon Feb 19 2018

...FREEZE WARNING REMAINS IN EFFECT FROM 10 PM THIS EVENING TO  
9 AM PST TUESDAY......FROST ADVISORY REMAINS IN EFFECT FROM 10 PM TUESDAY TO 8 AM  
PST WEDNESDAY...

\* Temperature...Falling into the upper 20s to mid 30s tonight into  
Tuesday morning...and into the 30s tonight into Wednesday  
morning.

\* Duration...Several hours of temperatures sufficient for frost  
each night with 4 to 6 hours of near or below freezing  
conditions.

\* Location...Coldest temperatures in low-lying, wind-sheltered  
areas...especially in southern and eastern portions of the  
Inland Empire.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Freeze Warning means sub-freezing temperatures are imminent or  
highly likely. These conditions will kill crops and other  
sensitive vegetation.

A Frost Advisory means that widespread frost is expected.  
Sensitive outdoor plants may be killed if left uncovered.

&amp;&amp;

**February 19, 2018 Exceptional Event, Imperial County****Appendix A**

\$\$

CAZ060-192230-

/O.CON.KSGX.HW.W.0003.000000T0000Z-180220T0200Z/

Apple and Lucerne Valleys-

Including the cities of Victorville, Hesperia, and Apple Valley

308 AM PST Mon Feb 19 2018

...HIGH WIND WARNING REMAINS IN EFFECT UNTIL 6 PM PST THIS EVENING...

\* Winds...Southwest to west winds 20 to 30 mph with occasional gusts to 65 mph.

\* Timing/Location...Strongest winds overnight near the foothills through early this morning.

\* Impacts...Strong winds will make travel difficult for high-profile vehicles. Blowing dust and sand may reduce visibility to near-zero in a few locations

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A High Wind Warning means a hazardous high wind event is expected or occurring. Sustained wind speeds of at least 40 mph or gusts of 58 mph or more can lead to property damage.

&amp;&amp;

\$\$

CAZ065-192230-

/O.CON.KSGX.WI.Y.0006.000000T0000Z-180220T0200Z/

/O.CON.KSGX.FR.Y.0002.180220T0600Z-180220T1700Z/

San Geronio Pass Near Banning-

Including the cities of Banning and Desert Hot Springs

308 AM PST Mon Feb 19 2018

...WIND ADVISORY REMAINS IN EFFECT UNTIL 6 PM PST THIS EVENING...  
...FROST ADVISORY REMAINS IN EFFECT FROM 10 PM THIS EVENING TO 9 AM PST TUESDAY...

\* Winds...Areas of west winds 25 to 35 mph with gusts to 55 mph. Isolated gusts to 70 mph in the northern Coachella Valley below the San Geronio Pass.

\* Temperatures...Falling into the lower to mid 30s for late tonight into Tuesday morning with areas of frost possible.

\* Duration...Several hours with temperatures sufficient for frost late tonight into Tuesday morning.

\* Impacts...Strong winds will make travel difficult for high-profile vehicles. Sensitive outdoor plants may be killed if

left uncovered.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that winds of 35 mph are expected. Winds this strong can make driving difficult...especially for high profile vehicles. Use extra caution.

A Frost Advisory means that widespread frost is expected. Sensitive outdoor plants may be killed if left uncovered.

&&

\$\$

CAZ050-192230-

/O.CON.KSGX.WI.Y.0006.180219T1600Z-180220T0200Z/

/O.CON.KSGX.FR.Y.0002.180220T0600Z-180220T1700Z/

San Diego County Valleys-

Including the cities of Escondido, El Cajon, San Marcos, La Mesa, Santee, and Poway

308 AM PST Mon Feb 19 2018

...WIND ADVISORY REMAINS IN EFFECT FROM 8 AM THIS MORNING TO 6 PM PST THIS EVENING...

...FROST ADVISORY REMAINS IN EFFECT FROM 10 PM THIS EVENING TO 9 AM PST TUESDAY...

\* Winds...Areas of winds west 15 to 25 mph with gusts to 40 mph on Monday.

\* Temperatures...Falling into the lower to mid 30s for late tonight into Tuesday morning with areas of frost possible with coldest temperatures in the inland valleys near the foothills of the mountains.

\* Impacts...Strong winds will make travel difficult for high-profile vehicles. Watch for broken tree limbs and downed palm fronds. Sensitive outdoor plants may be killed if left uncovered.

\* Outlook...Patchy frost is also possible late tonight into Wednesday morning...mainly for the inland valleys near the foothills of the mountains.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that winds of 35 mph are expected. Winds this strong can make driving difficult...especially for high profile vehicles. Use extra caution.

A Frost Advisory means that widespread frost is expected. Sensitive outdoor plants may be killed if left uncovered.

&amp;&amp;

\$\$

CAZ061-062-192230-

/O.CON.KSGX.WI.Y.0006.000000T0000Z-180220T0200Z/

Coachella Valley-San Diego County Deserts-

Including the cities of Indio, Palm Springs, Cathedral City,  
Palm Desert, Palm Desert Country, La Quinta, Coachella,  
and Borrego Springs

308 AM PST Mon Feb 19 2018

...WIND ADVISORY REMAINS IN EFFECT UNTIL 6 PM PST THIS EVENING...

\* Winds...Areas of northwest to west winds 25 to 35 mph with gusts  
to 55 mph and isolated gusts to 70 mph.

\* Location...Strongest gusts near the mountains...and in the  
Coachella Valley north and east of Interstate 10.

\* Impacts...Strong winds will make travel difficult for high-  
profile vehicles. Blowing dust and sand may reduce visibility  
to near zero in a few locations.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that winds of 35 mph are expected. Winds  
this strong can make driving difficult...especially for high  
profile vehicles. Use extra caution.

&amp;&amp;

\$\$

CAZ043-192230-

/O.CON.KSGX.WI.Y.0006.180219T1600Z-180220T0200Z/

San Diego County Coastal Areas-

Including the cities of Vista, Carlsbad, Encinitas, Chula Vista,  
National City, and San Diego

308 AM PST Mon Feb 19 2018

...WIND ADVISORY REMAINS IN EFFECT FROM 8 AM THIS MORNING TO 6 PM  
PST THIS EVENING...

\* Winds...Areas of winds west 15 to 25 mph with gusts to 40 mph.

\* Location...Strongest gusts to 45 mph near the coast.

\* Impacts...Strong winds will make travel difficult for high-  
profile vehicles. Watch for broken tree limbs and downed palm  
fronds.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

**February 19, 2018 Exceptional Event, Imperial County****Appendix A**

A Wind Advisory means that winds of 35 mph are expected. Winds this strong can make driving difficult...especially for high profile vehicles. Use extra caution.

&amp;&amp;

\$\$

17

# IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

**Department of Agronomy**

716 Farm House Ln

Ames, IA 50011

akrherz@iastate.edu

515-294-5978 phone



Facebook



Twitter



Github



YouTube



RSS

Copyright © 2001-2019

Iowa State University

of Science and Technology

All rights reserved.

Non-discrimination Policy

Privacy Policy

Digital Access &amp; Accessibility

┌  
637

WWUS75 KPSR 191023  
NPWPSR

**See below for Imperial Southwest**

URGENT - WEATHER MESSAGE  
National Weather Service Phoenix AZ  
323 AM MST Mon Feb 19 2018

CAZ563>565-567-568-191130-  
/O.CAN.KPSR.WI.Y.0004.180219T1900Z-180220T0400Z/  
Salton Sea-Chuckwalla Mountains-Imperial County Southeast-  
Imperial Valley-Chiriaco Summit-  
Including the cities of Desert Shores,  
Imperial Hot Mineral Springs, Winterhaven, El Centro, Calexico,  
Alamorio, Brawley, and Chiriaco Summit  
223 AM PST Mon Feb 19 2018

...WIND ADVISORY IS CANCELLED...

The National Weather Service in Phoenix has cancelled the Wind  
Advisory.

Winds have dropped below advisory criteria. However, breezy  
conditions are still anticipated today with gusts occasionally  
reaching 30 to 35 mph. Lofted dust with reduced visibilities may  
also affect the region.

\$\$

AZZ557-558-563-200400-  
/O.EXB.KPSR.WI.Y.0004.180219T1800Z-180220T0400Z/  
Mazatzal Mountains-Pinal/Superstition Mountains-  
Southeast Gila County-  
Including the city of Sunflower  
323 AM MST Mon Feb 19 2018

...WIND ADVISORY IN EFFECT FROM 11 AM THIS MORNING TO 9 PM MST  
THIS EVENING...

The National Weather Service in Phoenix has issued a Wind  
Advisory, which is in effect from 11 AM this morning to 9 PM MST  
this evening.

\* AFFECTED AREA...The higher terrain of eastern Maricopa, Pinal  
and southern Gila Counties including the Mazatzal and  
Superstition Mountains.

\* TIMING...Now through this evening.

\* WINDS...West winds 30 to 40 mph with gusts up to 50 mph.

\* IMPACTS...Strong winds will create difficult and hazardous  
driving conditions, especially for high profile vehicles.

## PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

&amp;&amp;

\$\$

CAZ562-566-200400-

/O.CON.KPSR.WI.Y.0004.000000T0000Z-180220T0400Z/

Imperial County Southwest-Imperial County West-

Including the cities of Mountain Spring, Coolidge Springs,  
Salton City, Winona, Coyote Wells, Ocotillo, and Plaster City

223 AM PST Mon Feb 19 2018

...WIND ADVISORY REMAINS IN EFFECT UNTIL 8 PM PST THIS EVENING...

\* AFFECTED AREA...Southwest Imperial County including Interstate 8.

\* TIMING...Now through this evening.

\* WINDS...West winds 30 to 40 mph with gusts up to 50 mph.

\* IMPACTS...Strong winds in far southwestern Imperial County will create difficult and hazardous driving conditions, especially for high profile vehicles. Areas of blowing dust may also lead to sharply reduced visibilities.

## PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

&amp;&amp;

\$\$

CAZ560-200400-

/O.CON.KPSR.WI.Y.0004.000000T0000Z-180220T0400Z/

Joshua Tree NP West-

Including the cities of Cottonwood Visitor and Lost Horse-Keys

**February 19, 2018 Exceptional Event, Imperial County****Appendix A**

Village

223 AM PST Mon Feb 19 2018

...WIND ADVISORY REMAINS IN EFFECT UNTIL 8 PM PST THIS EVENING...

\* AFFECTED AREA...Joshua Tree National Park.

\* TIMING...Now through this evening.

\* WINDS...West winds 25 to 35 mph with gusts up to 45 mph.

\* IMPACTS...Strong winds in Joshua Tree National Park will create difficult and hazardous driving conditions, especially for high profile vehicles. Areas of blowing dust may also lead to sharply reduced visibilities.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

&&

\$\$

# IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

## Department of Agronomy

716 Farm House Ln

Ames, IA 50011

akrherz@iastate.edu

515-294-5978 phone



Facebook



┌  
921  
FXUS66 KSGX 191200  
AFDSGX

Area Forecast Discussion  
National Weather Service San Diego CA  
400 AM PST Mon Feb 19 2018

.SYNOPSIS...

A cold trough of low pressure will be across the western states into the eastern Pacific into next week...but will be weaker during next weekend. This will maintain below average temperatures. There will be periods of strong gusty west to northwest winds today in the mountains and deserts...and across the coastal waters into San Diego County. Scattered showers along and west of the mountains will decrease early this morning...but with additional showers possible near the mountains this afternoon and evening with snow levels near 3500 feet. Colder for tonight and Tuesday night with areas of frost in the valleys. There will be additional chances for showers along and west of the mountains at times for Wednesday afternoon into Friday evening. Dry and a little warmer for next weekend.

&&

.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE...  
SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO  
COUNTIES...

A large cold low pressure system will remain over the western states in the eastern Pacific into next week...but it will be weaker during next weekend.

There have been scattered light showers overnight along and west of the mountains with amounts ranging from nothing to a few hundredths near the coast...to locally one to two tenths of an inch in the mountains. Coverage has been pretty limited...but greater such as it is along and near the coastal slopes of the San Bernardino County mountains...and for portions of San Diego County. Showers are expected to decrease through early this morning. Additional light showers are possible for this afternoon and evening...mainly near the mountains with snow levels near 3500 feet.

Strong gusty west winds in the mountains and deserts will gradually diminish a little from north to south during the late morning through afternoon. Gale force winds across the coastal waters will spread gusty west winds across San Diego County coastal and valley areas today.

It will be much cooler today with high temperatures 15 to locally 25 degrees cooler than Sunday...15 or more degrees below average for most areas except right at the coast. Cold nights will follow

**February 19, 2018 Exceptional Event, Imperial County****Appendix A**

for tonight and Tuesday night as winds weaken with areas of frost in the valleys.

The global models are in generally better agreement through next weekend near the West Coast. This will maintain well below average high temperatures through Friday with additional chances for showers along and west of the mountains for Wednesday afternoon into Friday evening with snow levels remaining fairly low.

High temperatures will warm a little for next weekend...but remain below average.

&&

.AVIATION...

191000Z...Coast and Valleys: Skies will gradually scatter out this morning from northwest to southeast. Through 17Z generally broken clouds at around 3000 feet msl vcnty KSAN and isolated -shra. Scattered clouds through 21Z until broken clouds 4000-6000 feet return this afternoon through about 05Z tonight, becoming mostly clear thereafter. Areas of west winds 20-30 kt will occur near the coast through about 00Z today and will likely bring occasional gusts over 30 kt at KSAN.

Mountains and Deserts: Broken clouds most of the day on coastal slopes. Local terrain obscuration between 2500-5000 feet msl along with isolated -shra/-shsn through 17Z. Tops to 8000 feet. Scattered clouds 5000 feet msl in the desert. Southwest to west winds 25-35 kt with gusts to 55 kt will continue over the mountain crests and some of the desert mountain slopes through this afternoon. Occasional vis reductions 3-5sm in BLDU for some areas. Rotor activity near KPSP through around 16Z this morning.

&&

.MARINE...

Gales and hazardous seas are forecast today and tonight. See the Marine Weather Message and Coastal Waters Forecast for details. No hazardous winds or seas are expected Tuesday into Thursday, but hazardous winds and seas are likely again late Thursday and Friday.

&&

.SKYWARN...

Skywarn activation is not requested. However weather spotters are encouraged to report significant weather conditions.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...Winter Weather Advisory until 10 PM PST this evening for  
Riverside County Mountains-San Bernardino County Mountains-

**February 19, 2018 Exceptional Event, Imperial County**  
San Diego County Mountains.**Appendix A**

Wind Advisory until 6 PM PST this evening for Coachella Valley-San Diego County Deserts-San Gorgonio Pass Near Banning.

High Wind Warning until 6 PM PST this evening for Apple and Lucerne Valleys.

Frost Advisory from 10 PM this evening to 9 AM PST Tuesday for San Diego County Valleys-San Gorgonio Pass Near Banning.

Wind Advisory from 8 AM this morning to 6 PM PST this evening for San Diego County Coastal Areas-San Diego County Valleys.

Frost Advisory from 10 PM Tuesday to 8 AM PST Wednesday for San Bernardino and Riverside County Valleys-The Inland Empire.

Freeze Warning from 10 PM this evening to 9 AM PST Tuesday for San Bernardino and Riverside County Valleys-The Inland Empire.

PZ...Gale Warning until 6 AM PST Tuesday for Waters from San Mateo point to the Mexican Border Extending 30 to 60 nm out including San Clemente Island.

Small Craft Advisory until 6 AM PST Tuesday for Coastal Waters from San Mateo Point to the Mexican Border and out to 30 nm.

&&

\$\$

PUBLIC...17

AVIATION/MARINE...MM

# IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

## Department of Agronomy

716 Farm House Ln

Ames, IA 50011

☐

300

FXUS65 KPSR 191231

AFDPSR

Area Forecast Discussion

National Weather Service Phoenix AZ

531 AM MST Mon Feb 19 2018

.UPDATE...Updated Aviation and Fire Weather discussions.

&&

.SYNOPSIS...

Temperatures will cool drastically today and Tuesday as a low pressure system drops southward through the Great Basin and into the Desert Southwest. Winds will become very breezy today with light rain and snow chances for the higher terrain through early Tuesday morning. In the wake of the low pressure system, very cool weather will persist only warming back to near average late this weekend.

&&

.DISCUSSION...

An upper level trough continues to dive southward this morning into the Great Basin and is currently bringing rain and snow showers across the West Coast. As this feature continues to move southward throughout the day, pressure gradients will continue to tighten ramping up the southwesterly flow across the desert southwest. This has already advected a slug of moisture into our area with PWs at 0.78 inches in Tucson's 00Z sounding, up roughly 0.4 inches from 24 hours ago.

The prominent orographic lift along with the higher moisture has allowed weakly convective showers to generate over the higher terrain north and east of Phoenix. Tucson's sounding indicates roughly 100 J/kg of mixed layer CAPE while model analysis suggests similar values are currently being observed over Gila County. Given that moisture and the strong southwesterly flow (i.e. orographic lift) will remain fairly steady through this afternoon, expecting showers to continue for the higher terrain until moisture shuts off behind the front early Tuesday morning.

The associated surface front with the aforementioned trough is currently stretched across southern Nevada but will continue to race down towards our CWA this morning. Models indicate this front

will rip through Blythe around 8am this morning and into the Phoenix metro this afternoon/evening. While the front is expected to be dry for lower elevations, we are expecting some very breezy/windy conditions with it. Consequently, we have a wind advisory for portions of SE California and also for the higher terrain of Gila County. For the Phoenix area, winds will not quite be at advisory criteria but gusts up to 30 mph could be realized. Winds are forecast to quickly settle down by late Monday night.

Behind the front, colder and much drier air will begin flooding into our area. By Tuesday afternoon, 850 mb temperatures will only be around 1-2 C over Phoenix which would translate into highs in the mid-50s! This is despite the fact that skies will be crystal clear under the late February sun. Believe it or not, this could match or best the coldest day so far this winter which was 57 degrees observed on December 21st. Temperatures are forecast to plummet Tuesday night after sunset with widespread 30s expected by Wednesday morning in the lower deserts. In fact, the coldest lower desert locations could briefly drop into the upper 20s during this period!

This long wave trough is forecast to stick around through at least Friday. However, the warm February sun will undoubtedly modify this airmass on both Wednesday and Thursday bringing a bit of warming each day. Yet another shortwave will rotate through this trough come Friday which looks to be relatively cold in nature but will not be packing much in the way of moisture. PWs are forecast to be around 0.5 inches at best but strong PVA forcing may accompany this trough if indeed it comes to fruition. Really, the main impact would be some breezy conditions along with some light snowfall above 4000 ft. However, there are still model disagreements with the ECMWF & GEFS offering a much drier solution than the GFS.

Quasi-zonal flow develops for the weekend and possibly into early next week bringing tranquil weather. This pattern would allow temperatures to gradually rise back to near normal while winds stay relatively light.

&&

.AVIATION...

South-Central Arizona including KPHX, KIWA, and KSDL:

Abundant low-level moisture is resulting in CIGS generally in a 4-6k ft range across the Phoenix area. The stratocu will lift and eventually dissipate this afternoon as drier air overspreads the area behind a cold front. Further to the north and east, scattered showers will persist through most of the day across the Mogollon Rim and there is a slight chance of a shower backbuilding towards

KSDL.

The other aviation weather concern will be the windy conditions with gusts to 30 kt likely at KPHX. Southwesterly winds early this morning will veer to westerly later this morning. Winds will gradually subside tonight, though it is likely that the westerly flow will persist through at least 10z Tuesday.

Southeast California/Southwest Arizona including KIPL and KBLH: Main aviation weather impact will be the windy conditions behind a cold front. Gusts to 30-35 kt will be possible, particularly at KIPL. Otherwise, there is some potential for blowing dust and associated reductions in visibility through late this afternoon. Latest model guidance continues to indicate that winds will subside tonight.

Aviation Discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Wednesday through Sunday:

A series of low pressure systems will move through the Desert Southwest through the weekend. This will help to reinforce the below normal temperatures across the region, while there will only be a slight chance of precipitation with the system Friday and Friday night. Below normal RHs are also expected particularly Wednesday, though winds will remain below critical thresholds through the period. A warming trend is likely by Sunday, though temperature will remain below average.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...Wind Advisory from 11 AM this morning to 9 PM MST this evening for AZZ557-558-563.

CA...Wind Advisory until 8 PM PST this evening for CAZ560-562-566.

&&

\$\$

Visit us on Facebook, Twitter, and at [weather.gov/phoenix](http://weather.gov/phoenix)

┌  
231  
WWUS75 KPSR 191316  
NPWPSR

URGENT - WEATHER MESSAGE  
National Weather Service Phoenix AZ  
616 AM MST Mon Feb 19 2018

CAZ563-565-567-191800-  
/O.EXB.KPSR.WI.Y.0004.000000T0000Z-180219T1800Z/  
Salton Sea-Imperial County Southeast-Imperial Valley-  
Including the cities of Desert Shores, Winterhaven, El Centro,  
Calexico, Alamo, and Brawley  
516 AM PST Mon Feb 19 2018

...WIND ADVISORY IN EFFECT UNTIL 10 AM PST THIS MORNING...

The National Weather Service in Phoenix has issued a Wind  
Advisory, which is in effect until 10 AM PST this morning.

\* AFFECTED AREA...Imperial County including Interstate 8, El  
Centro and the Imperial Valley.

\* TIMING...Now through late this morning.

\* WINDS...West winds 25 to 35 mph with gusts up to 40 mph.

\* IMPACTS...Strong winds in Imperial County will create difficult  
and hazardous driving conditions, especially for high profile  
vehicles. Areas of blowing dust may also lead to sharply reduced  
visibilities.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between  
30 and 40 mph are expected, or wind gusts of between 40 and  
58 mph. Winds this strong can make driving difficult, especially  
for high profile vehicles. In addition, strong winds over desert  
areas could result in briefly lowered visibilities to well under  
a mile at times in blowing dust or blowing sand. Use extra  
caution.

&&

\$\$

CAZ562-566-200130-  
/O.CON.KPSR.WI.Y.0004.000000T0000Z-180220T0400Z/  
Imperial County Southwest-Imperial County West-  
Including the cities of Mountain Spring, Coolidge Springs,  
Salton City, Winona, Coyote Wells, Ocotillo, and Plaster City  
516 AM PST Mon Feb 19 2018

**February 19, 2018 Exceptional Event, Imperial County****Appendix A**

...WIND ADVISORY REMAINS IN EFFECT UNTIL 8 PM PST THIS EVENING...

- \* AFFECTED AREA...Southwest Imperial County including Interstate 8.
- \* TIMING...Now through this evening.
- \* WINDS...West winds 30 to 40 mph with gusts up to 50 mph.
- \* IMPACTS...Strong winds in far southwestern Imperial County will create difficult and hazardous driving conditions, especially for high profile vehicles. Areas of blowing dust may also lead to sharply reduced visibilities.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

&&

\$\$

CAZ560-200130-

/O.CON.KPSR.WI.Y.0004.000000T0000Z-180220T0400Z/

Joshua Tree NP West-

Including the cities of Cottonwood Visitor and Lost Horse-Keys Village

516 AM PST Mon Feb 19 2018

...WIND ADVISORY REMAINS IN EFFECT UNTIL 8 PM PST THIS EVENING...

- \* AFFECTED AREA...Joshua Tree National Park.
- \* TIMING...Now through this evening.
- \* WINDS...West winds 25 to 35 mph with gusts up to 45 mph.
- \* IMPACTS...Strong winds in Joshua Tree National Park will create difficult and hazardous driving conditions, especially for high profile vehicles. Areas of blowing dust may also lead to sharply reduced visibilities.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert



**February 19, 2018 Exceptional Event, Imperial County****Appendix A**

areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

&&

\$\$

AZZ557-558-563-200130-  
/O.CON.KPSR.WI.Y.0004.180219T1800Z-180220T0400Z/  
Mazatzal Mountains-Pinal/Superstition Mountains-  
Southeast Gila County-  
Including the city of Sunflower

616 AM MST Mon Feb 19 2018

...WIND ADVISORY REMAINS IN EFFECT FROM 11 AM THIS MORNING TO  
9 PM MST THIS EVENING...

\* AFFECTED AREA...The higher terrain of eastern Maricopa, Pinal  
and southern Gila Counties including the Mazatzal and  
Superstition Mountains.

\* TIMING...Now through this evening.

\* WINDS...West winds 30 to 40 mph with gusts up to 50 mph.

\* IMPACTS...Strong winds will create difficult and hazardous  
driving conditions, especially for high profile vehicles.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between  
30 and 40 mph are expected, or wind gusts of between 40 and  
58 mph. Winds this strong can make driving difficult, especially  
for high profile vehicles. In addition, strong winds over desert  
areas could result in briefly lowered visibilities to well under  
a mile at times in blowing dust or blowing sand. Use extra  
caution.

&&

\$\$

**IOWA STATE  
UNIVERSITY**

College of Ag

Department of Agronomy

730  
WWUS75 KPSR 191319  
NPWPSR

URGENT - WEATHER MESSAGE  
National Weather Service Phoenix AZ  
619 AM MST Mon Feb 19 2018

CAZ562-566-200400-  
/O.CON.KPSR.WI.Y.0004.000000T0000Z-180220T0400Z/  
Imperial County Southwest-Imperial County West-  
Including the cities of Mountain Spring, Coolidge Springs,  
Salton City, Winona, Coyote Wells, Ocotillo, and Plaster City  
519 AM PST Mon Feb 19 2018

...WIND ADVISORY REMAINS IN EFFECT UNTIL 8 PM PST THIS EVENING...

\* AFFECTED AREA...Southwest Imperial County including Interstate 8.

\* TIMING...Now through this evening.

\* WINDS...West winds 30 to 40 mph with gusts up to 50 mph.

\* IMPACTS...Strong winds in far southwestern Imperial County will create difficult and hazardous driving conditions, especially for high profile vehicles. Areas of blowing dust may also lead to sharply reduced visibilities.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

&&

\$\$

CAZ560-200400-  
/O.CON.KPSR.WI.Y.0004.000000T0000Z-180220T0400Z/  
Joshua Tree NP West-  
Including the cities of Cottonwood Visitor and Lost Horse-Keys Village  
519 AM PST Mon Feb 19 2018

...WIND ADVISORY REMAINS IN EFFECT UNTIL 8 PM PST THIS EVENING...

\* AFFECTED AREA...Joshua Tree National Park.

- \* TIMING...Now through this evening.
- \* WINDS...West winds 25 to 35 mph with gusts up to 45 mph.
- \* IMPACTS...Strong winds in Joshua Tree National Park will create difficult and hazardous driving conditions, especially for high profile vehicles. Areas of blowing dust may also lead to sharply reduced visibilities.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

&&

\$\$

AZZ557-558-563-200400-  
/O.CON.KPSR.WI.Y.0004.180219T1800Z-180220T0400Z/  
Mazatzal Mountains-Pinal/Superstition Mountains-  
Southeast Gila County-  
Including the city of Sunflower  
619 AM MST Mon Feb 19 2018

...WIND ADVISORY REMAINS IN EFFECT FROM 11 AM THIS MORNING TO  
9 PM MST THIS EVENING...

- \* AFFECTED AREA...The higher terrain of eastern Maricopa, Pinal and southern Gila Counties including the Mazatzal and Superstition Mountains.
- \* TIMING...Now through this evening.
- \* WINDS...West winds 30 to 40 mph with gusts up to 50 mph.
- \* IMPACTS...Strong winds will create difficult and hazardous driving conditions, especially for high profile vehicles.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

&amp;&amp;

\$\$

CAZ563-565-567-191800-  
/O.CON.KPSR.WI.Y.0004.000000T0000Z-180219T1800Z/  
Salton Sea-Imperial County Southeast-Imperial Valley-  
Including the cities of Desert Shores, Winterhaven, El Centro,  
Calexico, Alamo, and Brawley  
519 AM PST Mon Feb 19 2018

...WIND ADVISORY REMAINS IN EFFECT UNTIL 10 AM PST THIS MORNING...

\* AFFECTED AREA...Imperial County including Interstate 8, El Centro and the Imperial Valley.

\* TIMING...Now through late this morning.

\* WINDS...West winds 25 to 35 mph with gusts up to 40 mph.

\* IMPACTS...Strong winds in Imperial County will create difficult and hazardous driving conditions, especially for high profile vehicles. Areas of blowing dust may also lead to sharply reduced visibilities.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

&amp;&amp;

\$\$

IOWA STATE  
UNIVERSITY

College of Ag

Department of Agronomy

┌  
564  
FXUS66 KSGX 191627  
AFDSGX

Area Forecast Discussion  
National Weather Service San Diego CA  
827 AM PST Mon Feb 19 2018

.SYNOPSIS...

A few more isolated rain and snow showers could develop late this afternoon or evening, otherwise sunny to partly cloudy skies today and much cooler. The low pressure trough responsible will move east on Tuesday, but several more weaker systems will slide south over the region during the latter half of the week, keeping temperatures below average, and possibly sparking more periods of scattered, light showers. The winds will continue strong and gusty through this evening, then weaken late tonight. Continued quite cool on Tuesday, followed by slight warming midweek. Dry and a little warmer next weekend.

&&

.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE...  
SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO  
COUNTIES...

Satellite imagery this morning showed clearing pushing inland from the coast. Clouds remained over the mts, and there were more cold cumulus drifting SE well offshore. The 12Z Miramar sounding had a 4 degree C inversion based near 5500 FT MSL with 24 hour cooling below of 5 to 7 degrees C. the sounding was quite dry as well with a PW of only 0.31 inch. Surface pressure gradients were running around 10 MBS onshore KSAN to SW NV and 6-8 MBS to the lower deserts. Peak westerly wind gusts at 8 AM PST were 45 to 60 MPH in the onshore wind-prone areas of the San Diego Mts, but many areas were gusting 25 to 30 MPH this morning at lower elevations too. Based on sfc obs...The snow level was 3000-3500 FT. Radar still had some weak returns over the mts, moving rapidly east. A statement for peak wind gusts and accumulated precip is headlined on our web page. Precip amounts have been very light.

The forecast has been updated to remove POPS at lower elevations of the CWA for the remainder of today. Max temps may be a tad underdone given all of the sunshine this morning, but the airmass is quite cold so don't look for much of a temp increase through the day, and the gusty winds will make it feel even cooler.

From previous discussion...

A large cold low pressure system will remain over the western states in the eastern Pacific into next week...but it will be weaker during next weekend.

**February 19, 2018 Exceptional Event, Imperial County****Appendix A**

There have been scattered light showers overnight along and west of the mountains with amounts ranging from nothing to a few hundredths near the coast...to locally one to two tenths of an inch in the mountains. Coverage has been pretty limited...but greater such as it is along and near the coastal slopes of the San Bernardino County mountains...and for portions of San Diego County. Showers are expected to decrease through early this morning. Additional light showers are possible for this afternoon and evening...mainly near the mountains with snow levels near 3500 feet.

Strong gusty west winds in the mountains and deserts will gradually diminish a little from north to south during the late morning through afternoon. Gale force winds across the coastal waters will spread gusty west winds across San Diego County coastal and valley areas today.

It will be much cooler today with high temperatures 15 to locally 25 degrees cooler than Sunday...15 or more degrees below average for most areas except right at the coast. Cold nights will follow for tonight and Tuesday night as winds weaken with areas of frost in the valleys.

The global models are in generally better agreement through next weekend near the West Coast. This will maintain well below average high temperatures through Friday with additional chances for showers along and west of the mountains for Wednesday afternoon into Friday evening with snow levels remaining fairly low.

High temperatures will warm a little for next weekend...but remain below average.

&&

.AVIATION...

191615Z...Coast and Valleys...Isolated showers through 18Z. SCT-BKN clouds with bases at or above 3500 feet MSL and unrestricted vis through 06Z Tue. Mostly clear with unrestricted vis after 06Z Tue. Areas of west winds 20-30 kt will occur near the coast through about 00Z Tue and will likely bring occasional gusts over 30 kt at KSAN. Winds weaken after 00Z Tue.

&&

.MARINE...

Northwest winds with gusts 30 to 40 kts and hazardous seas will continue through tonight. See the Marine Weather Message and Coastal Waters Forecast for details. No hazardous marine conditions are expected Tuesday into Thursday, but hazardous winds and seas are likely again late Thursday and Friday.

&&

.SKYWARN...

**February 19, 2018 Exceptional Event, Imperial County****Appendix A**

Skywarn activation is not requested. However weather spotters are encouraged to report significant weather conditions.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...Winter Weather Advisory until 10 PM PST this evening for  
Riverside County Mountains-San Bernardino County Mountains-  
San Diego County Mountains.

Wind Advisory until 6 PM PST this evening for Coachella Valley-  
San Diego County Deserts-San Gorgonio Pass Near Banning.

High Wind Warning until 6 PM PST this evening for Apple and  
Lucerne Valleys.

Frost Advisory from 10 PM this evening to 9 AM PST Tuesday for  
San Diego County Valleys-San Gorgonio Pass Near Banning.

Wind Advisory from 8 AM this morning to 6 PM PST this evening  
for San Diego County Coastal Areas-San Diego County Valleys.

Frost Advisory from 10 PM Tuesday to 8 AM PST Wednesday for San  
Bernardino and Riverside County Valleys-The Inland Empire.

Freeze Warning from 10 PM this evening to 9 AM PST Tuesday for  
San Bernardino and Riverside County Valleys-The Inland  
Empire.

PZ...Gale Warning until 6 AM PST Tuesday for Waters from San Mateo  
point to the Mexican Border Extending 30 to 60 nm out  
including San Clemente Island.

Small Craft Advisory until 6 AM PST Tuesday for Coastal Waters  
from San Mateo Point to the Mexican Border and out to 30 nm.

&&

\$\$

PUBLIC...jad/17  
AVIATION/MARINE...PG

**IOWA STATE  
UNIVERSITY**

College of Ag

☐

364

FXUS65 KPSR 191541

AFDPSR

Area Forecast Discussion

National Weather Service Phoenix AZ

840 AM MST Mon Feb 19 2018

.SYNOPSIS...

Temperatures will cool drastically today and Tuesday as a low pressure system drops southward through the Great Basin and into the Desert Southwest. Winds will become very breezy today with light rain and snow chances for the higher terrain through early Tuesday morning. In the wake of the low pressure system, very cool weather will persist only warming back to near average late this weekend.

&&

.DISCUSSION...

A pronounced PV anomaly was driving down the Sierra spine with an impressive 100kt H5 jet rounding the trough base bringing 10-16dm height falls into southern NV/UT. Locally, 6-8dm heights falls have been measured and objective analyses shows an increasing pressure gradient and pre-frontal LLJ developing. Regional observations are now show a more extensive surface reflection tapping the higher momentum air with increased daytime mixing. Advisory level winds are already being reported in SW Imperial County; and the eastward spread of stronger winds aloft will translate across the higher peaks of central AZ later today.

Otherwise, a favorable orographic component continues east of Phoenix, though the strengthening midtropospheric wind profiles seem to be pushing most of the shallow convective showers further away from the forecast area and original ascent/generation zone. However, some enhanced convergence along the pre-frontal LLJ zone has allowed some deeper isolated convection within the Phoenix metro. This zone may shift through the metro during the day, and have made some minor adjustments to POP distribution. Also, given the current observations and the frontal approach, made some changes to hourly temperatures as daily highs were quickly being reached with deeper mixing this morning. With the strength of this system, some locations will actually see temperatures falling during the afternoon.

&&

.PREVIOUS DISCUSSION...



/531 AM MST Mon Feb 19 2018/

The prominent orographic lift along with the higher moisture has allowed weakly convective showers to generate over the higher terrain north and east of Phoenix. Tucson's sounding indicates roughly 100 J/kg of mixed layer CAPE while model analysis suggests similar values are currently being observed over Gila County. Given that moisture and the strong southwesterly flow (i.e. orographic lift) will remain fairly steady through this afternoon, expecting showers to continue for the higher terrain until moisture shuts off behind the front early Tuesday morning.

The associated surface front with the aforementioned trough is currently stretched across southern Nevada but will continue to race down towards our CWA this morning. Models indicate this front will rip through Blythe around 8am this morning and into the Phoenix metro this afternoon/evening. While the front is expected to be dry for lower elevations, we are expecting some very breezy/windy conditions with it. Consequently, we have a wind advisory for portions of SE California and also for the higher terrain of Gila County. For the Phoenix area, winds will not quite be at advisory criteria but gusts up to 30 mph could be realized. Winds are forecast to quickly settle down by late Monday night.

Behind the front, colder and much drier air will begin flooding into our area. By Tuesday afternoon, 850 mb temperatures will only be around 1-2 C over Phoenix which would translate into highs in the mid-50s! This is despite the fact that skies will be crystal clear under the late February sun. Believe it or not, this could match or best the coldest day so far this winter which was 57 degrees observed on December 21st. Temperatures are forecast to plummet Tuesday night after sunset with widespread 30s expected by Wednesday morning in the lower deserts. In fact, the coldest lower desert locations could briefly drop into the upper 20s during this period!

This long wave trough is forecast to stick around through at least Friday. However, the warm February sun will undoubtedly modify this air mass on both Wednesday and Thursday bringing a bit of warming each day. Yet another shortwave will rotate through this trough come Friday which looks to be relatively cold in nature but will not be packing much in the way of moisture. PWS are forecast to be around 0.5 inches at best but strong PVA forcing may accompany this trough if indeed it comes to fruition. Really, the main impact would be some breezy conditions along with some light snowfall above 4000 ft. However, there are still model disagreements with the ECMWF & GEFS offering a much drier solution than the GFS.

Quasi-zonal flow develops for the weekend and possibly into early

next week bringing tranquil weather. This pattern would allow temperatures to gradually rise back to near normal while winds stay relatively light.

&&

.AVIATION...

South-Central Arizona including KPHX, KIWA, and KSDL:

Abundant low-level moisture is resulting in CIGS generally in a 4-6k ft range across the Phoenix area. The stratocu will lift and eventually dissipate this afternoon as drier air overspreads the area behind a cold front. Further to the north and east, scattered showers will persist through most of the day across the Mogollon Rim and there is a slight chance of a shower backbuilding towards KSDL.

The other aviation weather concern will be the windy conditions with gusts to 30 kt likely at KPHX. Southwesterly winds early this morning will veer to westerly later this morning. Winds will gradually subside tonight, though it is likely that the westerly flow will persist through at least 10z Tuesday.

Southeast California/Southwest Arizona including KIPL and KBLH:

Main aviation weather impact will be the windy conditions behind a cold front. Gusts to 30-35 kt will be possible, particularly at KIPL. Otherwise, there is some potential for blowing dust and associated reductions in visibility through late this afternoon. Latest model guidance continues to indicate that winds will subside tonight.

Aviation Discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Wednesday through Sunday:

A series of low pressure systems will move through the Desert Southwest through the weekend. This will help to reinforce the below normal temperatures across the region, while there will only be a slight chance of precipitation with the system Friday and Friday night. Below normal RHs are also expected particularly Wednesday, though winds will remain below critical thresholds through the period. A warming trend is likely by Sunday, though temperature will remain below average.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...Wind Advisory from 11 AM this morning to 9 PM MST this evening  
for AZZ557-558-563.

CA...Wind Advisory until 8 PM PST this evening for CAZ560-562-566.

&&

\$\$

Visit us on Facebook, Twitter, and at [weather.gov/phoenix](http://weather.gov/phoenix)

DISCUSSION...MO/Wilson

AVIATION...Hirsch

FIRE WEATHER...Hirsch

# IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

## Department of Agronomy

716 Farm House Ln

Ames, IA 50011

[akrherz@iastate.edu](mailto:akrherz@iastate.edu)

515-294-5978 phone



Facebook



Twitter



Github



YouTube

**February 19, 2018 Exceptional Event, Imperial County**  
**See below for Imperial Southeast****Appendix A**

┌  
864  
WWUS75 KPSR 191557  
NPWPSR

URGENT - WEATHER MESSAGE  
National Weather Service Phoenix AZ  
857 AM MST Mon Feb 19 2018

CAZ562-566-200400-  
/O.CON.KPSR.WI.Y.0004.000000T0000Z-180220T0400Z/  
Imperial County Southwest-Imperial County West-  
Including the cities of Mountain Spring, Coolidge Springs,  
Salton City, Winona, Coyote Wells, Ocotillo, and Plaster City  
757 AM PST Mon Feb 19 2018

...WIND ADVISORY REMAINS IN EFFECT UNTIL 8 PM PST THIS EVENING...

\* AFFECTED AREA...Southwest Imperial County including Interstate  
8.

\* TIMING...Now through this evening.

\* WINDS...West winds 30 to 40 mph with gusts up to 50 mph.

\* IMPACTS...Strong winds in far southwestern Imperial County have  
created difficult and hazardous driving conditions, especially  
for high profile vehicles. Areas of blowing dust may also lead  
to sharply reduced visibilities.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between  
30 and 40 mph are expected, or wind gusts of between 40 and  
58 mph. Winds this strong can make driving difficult, especially  
for high profile vehicles. In addition, strong winds over desert  
areas could result in briefly lowered visibilities to well under  
a mile at times in blowing dust or blowing sand. Use extra  
caution.

&&

\$\$

CAZ560-200400-  
/O.CON.KPSR.WI.Y.0004.000000T0000Z-180220T0400Z/  
Joshua Tree NP West-  
Including the cities of Cottonwood Visitor and Lost Horse-Keys  
Village  
757 AM PST Mon Feb 19 2018

...WIND ADVISORY REMAINS IN EFFECT UNTIL 8 PM PST THIS EVENING...

\* AFFECTED AREA...Joshua Tree National Park.

- \* TIMING...Now through this evening.
- \* WINDS...West winds 25 to 35 mph with gusts up to 45 mph.
- \* IMPACTS...Strong winds in Joshua Tree National Park will create difficult and hazardous driving conditions, especially for high profile vehicles. Areas of blowing dust may also lead to sharply reduced visibilities.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

&&

\$\$

AZZ557-558-563-200400-  
/O.CON.KPSR.WI.Y.0004.180219T1800Z-180220T0400Z/  
Mazatzal Mountains-Pinal/Superstition Mountains-  
Southeast Gila County-  
Including the city of Sunflower  
857 AM MST Mon Feb 19 2018

...WIND ADVISORY REMAINS IN EFFECT UNTIL 9 PM MST THIS EVENING...

- \* AFFECTED AREA...The higher terrain of eastern Maricopa, Pinal and southern Gila Counties including the Mazatzal and Superstition Mountains.
- \* TIMING...Now through this evening.
- \* WINDS...West winds 25 to 35 mph with gusts up to 50 mph.
- \* IMPACTS...Strong winds will create difficult and hazardous driving conditions, especially for high profile vehicles.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

&amp;&amp;

\$\$

CAZ563-565-567-191800-

/O.CON.KPSR.WI.Y.0004.000000T0000Z-180219T1800Z/

Salton Sea-Imperial County Southeast-Imperial Valley-

Including the cities of Desert Shores, Winterhaven, El Centro,

Calexico, Alamorio, and Brawley

757 AM PST Mon Feb 19 2018

...WIND ADVISORY REMAINS IN EFFECT UNTIL 10 AM PST THIS MORNING...

\* AFFECTED AREA...Imperial County including Interstate 8, El Centro and the Imperial Valley.

\* TIMING...Now through late this morning.

\* WINDS...West winds 25 to 35 mph with gusts up to 40 mph.

\* IMPACTS...Strong winds in Imperial County have created difficult and hazardous driving conditions, especially for high profile vehicles. Areas of blowing dust may also lead to sharply reduced visibilities.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

&amp;&amp;

\$\$

┌  
864  
WWUS75 KPSR 191557  
NPWPSR

URGENT - WEATHER MESSAGE  
National Weather Service Phoenix AZ  
857 AM MST Mon Feb 19 2018

CAZ562-566-200400-  
/O.CON.KPSR.WI.Y.0004.000000T0000Z-180220T0400Z/  
Imperial County Southwest-Imperial County West-  
Including the cities of Mountain Spring, Coolidge Springs,  
Salton City, Winona, Coyote Wells, Ocotillo, and Plaster City  
757 AM PST Mon Feb 19 2018

...WIND ADVISORY REMAINS IN EFFECT UNTIL 8 PM PST THIS EVENING...

\* AFFECTED AREA...Southwest Imperial County including Interstate  
8.

\* TIMING...Now through this evening.

\* WINDS...West winds 30 to 40 mph with gusts up to 50 mph.

\* IMPACTS...Strong winds in far southwestern Imperial County have  
created difficult and hazardous driving conditions, especially  
for high profile vehicles. Areas of blowing dust may also lead  
to sharply reduced visibilities.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between  
30 and 40 mph are expected, or wind gusts of between 40 and  
58 mph. Winds this strong can make driving difficult, especially  
for high profile vehicles. In addition, strong winds over desert  
areas could result in briefly lowered visibilities to well under  
a mile at times in blowing dust or blowing sand. Use extra  
caution.

&&

\$\$

CAZ560-200400-  
/O.CON.KPSR.WI.Y.0004.000000T0000Z-180220T0400Z/  
Joshua Tree NP West-  
Including the cities of Cottonwood Visitor and Lost Horse-Keys  
Village  
757 AM PST Mon Feb 19 2018

...WIND ADVISORY REMAINS IN EFFECT UNTIL 8 PM PST THIS EVENING...

\* AFFECTED AREA...Joshua Tree National Park.

- \* TIMING...Now through this evening.
- \* WINDS...West winds 25 to 35 mph with gusts up to 45 mph.
- \* IMPACTS...Strong winds in Joshua Tree National Park will create difficult and hazardous driving conditions, especially for high profile vehicles. Areas of blowing dust may also lead to sharply reduced visibilities.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

&&

\$\$

AZZ557-558-563-200400-  
/O.CON.KPSR.WI.Y.0004.180219T1800Z-180220T0400Z/  
Mazatzal Mountains-Pinal/Superstition Mountains-  
Southeast Gila County-  
Including the city of Sunflower  
857 AM MST Mon Feb 19 2018

...WIND ADVISORY REMAINS IN EFFECT UNTIL 9 PM MST THIS EVENING...

- \* AFFECTED AREA...The higher terrain of eastern Maricopa, Pinal and southern Gila Counties including the Mazatzal and Superstition Mountains.
- \* TIMING...Now through this evening.
- \* WINDS...West winds 25 to 35 mph with gusts up to 50 mph.
- \* IMPACTS...Strong winds will create difficult and hazardous driving conditions, especially for high profile vehicles.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.



&amp;&amp;

\$\$

CAZ563-565-567-191800-

/O.CON.KPSR.WI.Y.0004.000000T0000Z-180219T1800Z/

Salton Sea-Imperial County Southeast-Imperial Valley-

Including the cities of Desert Shores, Winterhaven, El Centro,

Calexico, Alamo, and Brawley

757 AM PST Mon Feb 19 2018

...WIND ADVISORY REMAINS IN EFFECT UNTIL 10 AM PST THIS MORNING...

\* AFFECTED AREA...Imperial County including Interstate 8, El Centro and the Imperial Valley.

\* TIMING...Now through late this morning.

\* WINDS...West winds 25 to 35 mph with gusts up to 40 mph.

\* IMPACTS...Strong winds in Imperial County have created difficult and hazardous driving conditions, especially for high profile vehicles. Areas of blowing dust may also lead to sharply reduced visibilities.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

&amp;&amp;

\$\$

# IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

2

210

FXUS65 KPSR 191712

AFDPSR

Area Forecast Discussion

National Weather Service Phoenix AZ

1012 AM MST Mon Feb 19 2018

.UPDATE...Updated aviation discussion.

&&

.SYNOPSIS...

Temperatures will cool drastically today and Tuesday as a low pressure system drops southward through the Great Basin and into the Desert Southwest. Winds will become very breezy today with light rain and snow chances for the higher terrain through early Tuesday morning. In the wake of the low pressure system, very cool weather will persist only warming back to near average late this weekend.

&&

.DISCUSSION...

A pronounced PV anomaly was driving down the Sierra spine with an impressive 100kt H5 jet rounding the trough base bringing 10-16dm height falls into southern NV/UT. Locally, 6-8dm heights falls have been measured and objective analyses shows an increasing pressure gradient and pre-frontal LLJ developing. Regional observations are now show a more extensive surface reflection tapping the higher momentum air with increased daytime mixing. Advisory level winds are already being reported in SW Imperial County; and the eastward spread of stronger winds aloft will translate across the higher peaks of central AZ later today.

Otherwise, a favorable orographic component continues east of Phoenix, though the strengthening midtropospheric wind profiles seem to be pushing most of the shallow convective showers further away from the forecast area and original ascent/generation zone. However, some enhanced convergence along the pre-frontal LLJ zone has allowed some deeper isolated convection within the Phoenix metro. This zone may shift through the metro during the day, and have made some minor adjustments to POP distribution. Also, given the current observations and the frontal approach, made some changes to hourly temperatures as daily highs were quickly being reached with deeper mixing this morning. With the strength of this system, some locations will actually see temperatures falling during the afternoon.

&&

.PREVIOUS DISCUSSION...

/531 AM MST Mon Feb 19 2018/

The prominent orographic lift along with the higher moisture has allowed weakly convective showers to generate over the higher terrain north and east of Phoenix. Tucson's sounding indicates roughly 100 J/kg of mixed layer CAPE while model analysis suggests similar values are currently being observed over Gila County.

Given that moisture and the strong southwesterly flow (i.e. orographic lift) will remain fairly steady through this afternoon, expecting showers to continue for the higher terrain until moisture shuts off behind the front early Tuesday morning.

The associated surface front with the aforementioned trough is currently stretched across southern Nevada but will continue to race down towards our CWA this morning. Models indicate this front will rip through Blythe around 8am this morning and into the Phoenix metro this afternoon/evening. While the front is expected to be dry for lower elevations, we are expecting some very breezy/windy conditions with it. Consequently, we have a wind advisory for portions of SE California and also for the higher terrain of Gila County. For the Phoenix area, winds will not quite be at advisory criteria but gusts up to 30 mph could be realized. Winds are forecast to quickly settle down by late Monday night.

Behind the front, colder and much drier air will begin flooding into our area. By Tuesday afternoon, 850 mb temperatures will only be around 1-2 C over Phoenix which would translate into highs in the mid-50s! This is despite the fact that skies will be crystal clear under the late February sun. Believe it or not, this could match or best the coldest day so far this winter which was 57 degrees observed on December 21st. Temperatures are forecast to plummet Tuesday night after sunset with widespread 30s expected by Wednesday morning in the lower deserts. In fact, the coldest lower desert locations could briefly drop into the upper 20s during this period!

This long wave trough is forecast to stick around through at least Friday. However, the warm February sun will undoubtedly modify this air mass on both Wednesday and Thursday bringing a bit of warming each day. Yet another shortwave will rotate through this trough come Friday which looks to be relatively cold in nature but will not be packing much in the way of moisture. PWs are forecast to be around 0.5 inches at best but strong PVA forcing may accompany this trough if indeed it comes to fruition. Really, the main impact would be some breezy conditions along with some light snowfall above 4000 ft. However, there are still model

disagreements with the ECMWF & GEFS offering a much drier solution than the GFS.

Quasi-zonal flow develops for the weekend and possibly into early next week bringing tranquil weather. This pattern would allow temperatures to gradually rise back to near normal while winds stay relatively light.

&&

.AVIATION...

South-Central Arizona including KPHX, KIWA, and KSDL:

Gusty winds and low ceilings will be the two main aviation impacts through the TAF period. An abundance of low-level moisture has resulted in SCT to BKN cloud decks in the 4 to 6 kft range. These clouds decks will gradually lift and dissipate throughout the day, with mostly clear skies expected overnight. A chance for showers will persist through most of the day but will be confined primarily north and east of Phoenix terminals. Southwest winds with gusts to 30 kts will be possible this morning through around midnight. Thereafter winds will subside and remain out of the west.

Southeast California/Southwest Arizona including KIPL and KBLH:

Main aviation weather impact will be the windy conditions and blowing dust. Winds will be out of the northwest with gusts up to 30 to 40 kts, particularly at KIPL. These gusty winds will result in areas of blowing dust and associated reductions in visibility through late this evening. Thereafter winds will subside. Outside of any dust, skies will be clear.

Aviation Discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Wednesday through Sunday:

A series of low pressure systems will move through the Desert Southwest through the weekend. This will help to reinforce the below normal temperatures across the region, while there will only be a slight chance of precipitation with the system Friday and Friday night. Below normal RHs are also expected particularly Wednesday, though winds will remain below critical thresholds through the period. A warming trend is likely by Sunday, though temperature will remain below average.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...Wind Advisory until 9 PM MST this evening for AZZ557-558-563.

CA...Wind Advisory until 8 PM PST this evening for CAZ560-562-566.

Wind Advisory until 10 AM PST this morning for CAZ563-565-567.

&&

\$\$

Visit us on Facebook, Twitter, and at [weather.gov/phoenix](https://weather.gov/phoenix)

DISCUSSION...MO/Wilson

AVIATION..Hernandez

FIRE WEATHER...Hirsch

# IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

## Department of Agronomy

716 Farm House Ln

Ames, IA 50011

[akrherz@iastate.edu](mailto:akrherz@iastate.edu)

515-294-5978 phone



Facebook



Twitter



Github

┌  
446  
WWUS75 KPSR 191757  
NPWPSR

URGENT - WEATHER MESSAGE  
National Weather Service Phoenix AZ  
1057 AM MST Mon Feb 19 2018

CAZ563-565-567-192100-  
/O.EXT.KPSR.WI.Y.0004.000000T0000Z-180219T2100Z/  
Salton Sea-Imperial County Southeast-Imperial Valley-  
Including the cities of Desert Shores, Winterhaven, El Centro,  
Calexico, Alamo, and Brawley  
957 AM PST Mon Feb 19 2018

...WIND ADVISORY NOW IN EFFECT UNTIL 1 PM PST THIS AFTERNOON...

\* AFFECTED AREA...Imperial County including Interstate 8, El  
Centro and the Imperial Valley.

\* TIMING...Now through late this morning.

\* WINDS...West winds 25 to 35 mph with gusts up to 45 mph.

\* IMPACTS...Strong winds in Imperial County have created  
difficult and hazardous driving conditions, especially for  
high profile vehicles. Areas of blowing dust may also lead to  
sharply reduced visibilities.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between  
30 and 40 mph are expected, or wind gusts of between 40 and  
58 mph. Winds this strong can make driving difficult, especially  
for high profile vehicles. In addition, strong winds over desert  
areas could result in briefly lowered visibilities to well under  
a mile at times in blowing dust or blowing sand. Use extra  
caution.

&&

\$\$

CAZ562-566-200400-  
/O.CON.KPSR.WI.Y.0004.000000T0000Z-180220T0400Z/  
Imperial County Southwest-Imperial County West-  
Including the cities of Mountain Spring, Coolidge Springs,  
Salton City, Winona, Coyote Wells, Ocotillo, and Plaster City  
957 AM PST Mon Feb 19 2018

...WIND ADVISORY REMAINS IN EFFECT UNTIL 8 PM PST THIS EVENING...

\* AFFECTED AREA...Southwest Imperial County including Interstate

8.

- \* TIMING...Now through this evening.
- \* WINDS...West winds 30 to 40 mph with gusts up to 50 mph.
- \* IMPACTS...Strong winds in far southwestern Imperial County have created difficult and hazardous driving conditions, especially for high profile vehicles. Areas of blowing dust may also lead to sharply reduced visibilities.

## PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

&amp;&amp;

\$\$

CAZ560-200400-

/O.CON.KPSR.WI.Y.0004.000000T0000Z-180220T0400Z/

Joshua Tree NP West-

Including the cities of Cottonwood Visitor and Lost Horse-Keys Village

957 AM PST Mon Feb 19 2018

...WIND ADVISORY REMAINS IN EFFECT UNTIL 8 PM PST THIS EVENING...

- \* AFFECTED AREA...Joshua Tree National Park.
- \* TIMING...Now through this evening.
- \* WINDS...West winds 25 to 35 mph with gusts up to 45 mph.
- \* IMPACTS...Strong winds in Joshua Tree National Park will create difficult and hazardous driving conditions, especially for high profile vehicles. Areas of blowing dust may also lead to sharply reduced visibilities.

## PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

&amp;&amp;

\$\$

AZZ557-558-563-200400-  
/O.CON.KPSR.WI.Y.0004.180219T1800Z-180220T0400Z/  
Mazatzal Mountains-Pinal/Superstition Mountains-  
Southeast Gila County-  
Including the city of Sunflower  
1057 AM MST Mon Feb 19 2018

...WIND ADVISORY REMAINS IN EFFECT UNTIL 9 PM MST THIS EVENING...

\* AFFECTED AREA...The higher terrain of eastern Maricopa, Pinal  
and southern Gila Counties including the Mazatzal and  
Superstition Mountains.

\* TIMING...Now through this evening.

\* WINDS...West winds 25 to 35 mph with gusts up to 50 mph.

\* IMPACTS...Strong winds will create difficult and hazardous  
driving conditions, especially for high profile vehicles.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between  
30 and 40 mph are expected, or wind gusts of between 40 and  
58 mph. Winds this strong can make driving difficult, especially  
for high profile vehicles. In addition, strong winds over desert  
areas could result in briefly lowered visibilities to well under  
a mile at times in blowing dust or blowing sand. Use extra  
caution.

&amp;&amp;

\$\$



┌  
446  
WWUS75 KPSR 191757  
NPWPSR

URGENT - WEATHER MESSAGE  
National Weather Service Phoenix AZ  
1057 AM MST Mon Feb 19 2018

CAZ563-565-567-192100-  
/O.EXT.KPSR.WI.Y.0004.000000T0000Z-180219T2100Z/  
Salton Sea-Imperial County Southeast-Imperial Valley-  
Including the cities of Desert Shores, Winterhaven, El Centro,  
Calexico, Alamo, and Brawley  
957 AM PST Mon Feb 19 2018

...WIND ADVISORY NOW IN EFFECT UNTIL 1 PM PST THIS AFTERNOON...

\* AFFECTED AREA...Imperial County including Interstate 8, El  
Centro and the Imperial Valley.

\* TIMING...Now through late this morning.

\* WINDS...West winds 25 to 35 mph with gusts up to 45 mph.

\* IMPACTS...Strong winds in Imperial County have created  
difficult and hazardous driving conditions, especially for  
high profile vehicles. Areas of blowing dust may also lead to  
sharply reduced visibilities.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between  
30 and 40 mph are expected, or wind gusts of between 40 and  
58 mph. Winds this strong can make driving difficult, especially  
for high profile vehicles. In addition, strong winds over desert  
areas could result in briefly lowered visibilities to well under  
a mile at times in blowing dust or blowing sand. Use extra  
caution.

&&

\$\$

CAZ562-566-200400-  
/O.CON.KPSR.WI.Y.0004.000000T0000Z-180220T0400Z/  
Imperial County Southwest-Imperial County West-  
Including the cities of Mountain Spring, Coolidge Springs,  
Salton City, Winona, Coyote Wells, Ocotillo, and Plaster City  
957 AM PST Mon Feb 19 2018

...WIND ADVISORY REMAINS IN EFFECT UNTIL 8 PM PST THIS EVENING...

\* AFFECTED AREA...Southwest Imperial County including Interstate

8.

\* TIMING...Now through this evening.

\* WINDS...West winds 30 to 40 mph with gusts up to 50 mph.

\* IMPACTS...Strong winds in far southwestern Imperial County have created difficult and hazardous driving conditions, especially for high profile vehicles. Areas of blowing dust may also lead to sharply reduced visibilities.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

&&

\$\$

CAZ560-200400-

/O.CON.KPSR.WI.Y.0004.000000T0000Z-180220T0400Z/

Joshua Tree NP West-

Including the cities of Cottonwood Visitor and Lost Horse-Keys Village

957 AM PST Mon Feb 19 2018

...WIND ADVISORY REMAINS IN EFFECT UNTIL 8 PM PST THIS EVENING...

\* AFFECTED AREA...Joshua Tree National Park.

\* TIMING...Now through this evening.

\* WINDS...West winds 25 to 35 mph with gusts up to 45 mph.

\* IMPACTS...Strong winds in Joshua Tree National Park will create difficult and hazardous driving conditions, especially for high profile vehicles. Areas of blowing dust may also lead to sharply reduced visibilities.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

&amp;&amp;

\$\$

AZZ557-558-563-200400-  
/O.CON.KPSR.WI.Y.0004.180219T1800Z-180220T0400Z/  
Mazatzal Mountains-Pinal/Superstition Mountains-  
Southeast Gila County-  
Including the city of Sunflower  
1057 AM MST Mon Feb 19 2018

...WIND ADVISORY REMAINS IN EFFECT UNTIL 9 PM MST THIS EVENING...

\* AFFECTED AREA...The higher terrain of eastern Maricopa, Pinal  
and southern Gila Counties including the Mazatzal and  
Superstition Mountains.

\* TIMING...Now through this evening.

\* WINDS...West winds 25 to 35 mph with gusts up to 50 mph.

\* IMPACTS...Strong winds will create difficult and hazardous  
driving conditions, especially for high profile vehicles.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between  
30 and 40 mph are expected, or wind gusts of between 40 and  
58 mph. Winds this strong can make driving difficult, especially  
for high profile vehicles. In addition, strong winds over desert  
areas could result in briefly lowered visibilities to well under  
a mile at times in blowing dust or blowing sand. Use extra  
caution.

&amp;&amp;

\$\$

IOWA STATE  
UNIVERSITY

College of Ag

Department of Agronomy

┌  
653  
WWUS76 KSGX 192032  
NPWSGX

## See last page for San Diego Deserts

URGENT - WEATHER MESSAGE  
National Weather Service San Diego CA  
1232 PM PST Mon Feb 19 2018

...NEAR FREEZING TEMPERATURES IN THE VALLEYS WITH AREAS OF FROST  
TONIGHT AND TUESDAY NIGHT...

.Continued breezy to windy this evening, then winds decreasing  
late tonight. With clear skies and light winds, temperatures will  
drop rapidly in wind-sheltered areas. Areas of frost are expected  
along with freezing conditions in portions of the Inland Empire.

CAZ060-192145-  
/O.CAN.KSGX.HW.W.0003.000000T0000Z-180220T0200Z/  
Apple and Lucerne Valleys-  
1232 PM PST Mon Feb 19 2018

...HIGH WIND WARNING IS CANCELLED...

The National Weather Service in San Diego has cancelled the High  
Wind Warning.

Continued breezy with westerly winds of 15 to 25 MPH with gusts to  
35 MPH through about sunset, but high winds are no longer expected.

\$\$

CAZ050-200600-  
/O.CAN.KSGX.WI.Y.0006.000000T0000Z-180220T0200Z/  
/O.CON.KSGX.FR.Y.0002.180220T0600Z-180220T1700Z/  
San Diego County Valleys-  
Including the cities of Escondido, San Marcos, and Poway  
1232 PM PST Mon Feb 19 2018

...FROST ADVISORY REMAINS IN EFFECT FROM 10 PM THIS EVENING TO  
9 AM PST TUESDAY...  
...WIND ADVISORY IS CANCELLED...

The National Weather Service in San Diego has cancelled the Wind  
Advisory.

\* Winds are expected to remain below Advisory criteria for the  
remainder of the day.

\* Temperatures...Falling into the lower to mid 30s late tonight  
into Tuesday morning, with areas of frost possible. Coldest  
areas in the inland valleys near the foothills of the  
mountains.

**February 19, 2018 Exceptional Event, Imperial County****Appendix A**

\* Impacts...Sensitive outdoor plants may be killed if left uncovered.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Frost Advisory means that widespread frost is expected. Sensitive outdoor plants may be killed if left uncovered.

&&

\$\$

CAZ043-192145-

/O.CAN.KSGX.WI.Y.0006.000000T0000Z-180220T0200Z/

San Diego County Coastal Areas-  
1232 PM PST Mon Feb 19 2018

...WIND ADVISORY IS CANCELLED...

The National Weather Service in San Diego has cancelled the Wind Advisory.

While it will be breezy for the remainder of the day into this evening, Advisory strength winds are not expected.

\$\$

CAZ048-200600-

/O.CON.KSGX.FZ.W.0001.180220T0600Z-180220T1700Z/

/O.CON.KSGX.FR.Y.0003.180221T0600Z-180221T1600Z/

San Bernardino and Riverside County Valleys-The Inland Empire-  
Including the cities of Riverside, San Bernardino, Ontario,  
Moreno Valley, Fontana, Rancho Cucamonga, and Corona  
1232 PM PST Mon Feb 19 2018

...FREEZE WARNING REMAINS IN EFFECT FROM 10 PM THIS EVENING TO  
9 AM PST TUESDAY...

...FROST ADVISORY REMAINS IN EFFECT FROM 10 PM TUESDAY TO 8 AM  
PST WEDNESDAY...

\* Temperature...Falling into the upper 20s to mid 30s tonight  
into Tuesday morning...and into the 30s tonight into Wednesday  
morning.

\* Duration...Several hours of temperatures sufficient for frost  
each night with 4 to 6 hours of near or below freezing  
conditions.

\* Location...Coldest in low-lying, wind-sheltered areas...  
especially in southern and eastern portions of the Inland  
Empire.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

**February 19, 2018 Exceptional Event, Imperial County****Appendix A**

A Freeze Warning means sub-freezing temperatures are imminent or highly likely. These conditions will kill crops and other sensitive vegetation.

A Frost Advisory means that widespread frost is expected. Sensitive outdoor plants may be killed if left uncovered.

&&

\$\$

CAZ065-200600-  
/O.CON.KSGX.WI.Y.0006.000000T0000Z-180220T0200Z/  
/O.CON.KSGX.FR.Y.0002.180220T0600Z-180220T1700Z/  
San Gorgonio Pass Near Banning-  
Including the cities of Banning and Desert Hot Springs  
1232 PM PST Mon Feb 19 2018

...WIND ADVISORY REMAINS IN EFFECT UNTIL 6 PM PST THIS EVENING...  
...FROST ADVISORY REMAINS IN EFFECT FROM 10 PM THIS EVENING TO  
9 AM PST TUESDAY...

\* Winds...Areas of west winds 25 to 35 mph with gusts to 50 mph.  
Isolated gusts to 60 mph in the northern Coachella Valley below  
the San Gorgonio Pass.

\* Temperatures...Falling into the lower to mid 30s late tonight  
into Tuesday morning with areas of frost possible.

\* Duration...Several hours with temperatures sufficient for  
frost late tonight into Tuesday morning.

\* Impacts...Strong winds will make travel difficult for high-  
profile vehicles. Sensitive outdoor plants may be killed if  
left uncovered.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that winds of 35 mph are expected. Winds  
this strong can make driving difficult...especially for high  
profile vehicles. Use extra caution.

A Frost Advisory means that widespread frost is expected.  
Sensitive outdoor plants may be killed if left uncovered.

&&

\$\$

CAZ061-062-200200-  
/O.CON.KSGX.WI.Y.0006.000000T0000Z-180220T0200Z/  
Coachella Valley-San Diego County Deserts-  
Including the cities of Indio, Palm Springs, Cathedral City,  
Palm Desert, Palm Desert Country, La Quinta, Coachella,

**February 19, 2018 Exceptional Event, Imperial County**

and Borrego Springs

1232 PM PST Mon Feb 19 2018

...WIND ADVISORY REMAINS IN EFFECT UNTIL 6 PM PST THIS EVENING...

\* Winds...Areas of northwest to west winds 25 to 35 mph with isolated gusts to 50 mph.

\* Location...Strongest gusts near the mountains...and in the Coachella Valley north and east of Interstate 10.

\* Impacts...Strong winds will make travel difficult for high-profile vehicles. Blowing dust and sand may reduce visibility to near zero in a few locations.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that winds of 35 mph are expected. Winds this strong can make driving difficult...especially for high profile vehicles. Use extra caution.

&amp;&amp;

\$\$

# IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

**Department of Agronomy**

716 Farm House Ln

Ames, IA 50011

akrherz@iastate.edu

515-294-5978 phone



Facebook



Twitter



Github

187  
WWUS75 KPSR 192024  
NPWPSR

URGENT - WEATHER MESSAGE  
National Weather Service Phoenix AZ  
124 PM MST Mon Feb 19 2018

AZZ553-192300-  
/O.NEW.KPSR.DU.Y.0002.180219T2024Z-180219T2300Z/  
Northwest Pinal County-  
Including the cities of Casa Grande, Cactus Forest, Florence,  
and Coolidge  
124 PM MST Mon Feb 19 2018

...BLOWING DUST ADVISORY IN EFFECT UNTIL 4 PM MST THIS  
AFTERNOON...

The National Weather Service in Phoenix has issued a Blowing Dust  
Advisory, which is in effect until 4 PM MST this afternoon.

- \* AFFECTED AREA...Parts of northern Pinal County including  
Interstate 10 and Highway 347.
- \* TIMING...This Afternoon
- \* WINDS...Southwest 20 to 30 mph with gust to 35 mph
- \* VISIBILITY...Locally falling below 1 mile
- \* IMPACTS...Blowing dust will make driving difficult with sudden  
reductions in visibility possible.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

Be ready for a sudden drop in visibility. If you encounter  
blowing dust or blowing sand on the roadway or see it  
approaching, pull off the road as far as possible and put your  
vehicle in park. Turn the lights all the way off and keep your  
foot off the brake pedal.

Remember, pull aside, stay alive.

&&

\$\$

CAZ562-566-200000-  
/O.EXT.KPSR.WI.Y.0004.000000T0000Z-180220T0000Z/  
Imperial County Southwest-Imperial County West-  
Including the cities of Mountain Spring, Coolidge Springs,  
Salton City, Winona, Coyote Wells, Ocotillo, and Plaster City  
1224 PM PST Mon Feb 19 2018



**February 19, 2018 Exceptional Event, Imperial County****Appendix A**

...WIND ADVISORY NOW IN EFFECT UNTIL 4 PM PST THIS AFTERNOON...

- \* AFFECTED AREA...Southwest Imperial County including Interstate 8.
- \* TIMING...Now through this evening.
- \* WINDS...West winds 30 to 40 mph with gusts up to 50 mph.
- \* IMPACTS...Strong winds in far southwestern Imperial County have created difficult and hazardous driving conditions, especially for high profile vehicles. Areas of blowing dust may also lead to sharply reduced visibilities.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

&&

\$\$

CAZ560-200000-

/O.EXT.KPSR.WI.Y.0004.000000T0000Z-180220T0000Z/

Joshua Tree NP West-

Including the cities of Cottonwood Visitor and Lost Horse-Keys Village

1224 PM PST Mon Feb 19 2018

...WIND ADVISORY NOW IN EFFECT UNTIL 4 PM PST THIS AFTERNOON...

- \* AFFECTED AREA...Joshua Tree National Park.
- \* TIMING...Now through this evening.
- \* WINDS...West winds 25 to 35 mph with gusts up to 45 mph.
- \* IMPACTS...Strong winds in Joshua Tree National Park will create difficult and hazardous driving conditions, especially for high profile vehicles. Areas of blowing dust may also lead to sharply reduced visibilities.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially

**February 19, 2018 Exceptional Event, Imperial County**

for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

&&

\$\$

AZZ557-558-563-200400-

/O.CON.KPSR.WI.Y.0004.000000T0000Z-180220T0400Z/

Mazatzal Mountains-Pinal/Superstition Mountains-

Southeast Gila County-

Including the city of Sunflower

124 PM MST Mon Feb 19 2018

...WIND ADVISORY REMAINS IN EFFECT UNTIL 9 PM MST THIS EVENING...

\* AFFECTED AREA...The higher terrain of eastern Maricopa, Pinal and southern Gila Counties including the Mazatzal and Superstition Mountains.

\* TIMING...Now through this evening.

\* WINDS...West winds 25 to 35 mph with gusts up to 50 mph.

\* IMPACTS...Strong winds will create difficult and hazardous driving conditions, especially for high profile vehicles.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

&&

\$\$

CAZ563-565-567-192130-

/O.CON.KPSR.WI.Y.0004.000000T0000Z-180219T2100Z/

Salton Sea-Imperial County Southeast-Imperial Valley-

Including the cities of Desert Shores, Winterhaven, El Centro, Calexico, Alamorio, and Brawley

1224 PM PST Mon Feb 19 2018

...WIND ADVISORY REMAINS IN EFFECT UNTIL 1 PM PST THIS AFTERNOON...

\* AFFECTED AREA...Imperial County including Interstate 8, El

**February 19, 2018 Exceptional Event, Imperial County****Appendix A**

Centro and the Imperial Valley.

- \* TIMING...Now through late this morning.
- \* WINDS...West winds 25 to 35 mph with gusts up to 45 mph.
- \* IMPACTS...Strong winds in Imperial County have created difficult and hazardous driving conditions, especially for high profile vehicles. Areas of blowing dust may also lead to sharply reduced visibilities.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

&&

\$\$

# IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

## Department of Agronomy

716 Farm House Ln

Ames, IA 50011

akrherz@iastate.edu

515-294-5978 phone



Facebook



Twitter



Github

113  
FXUS66 KSGX 192128  
AFDSGX

Area Forecast Discussion  
National Weather Service San Diego CA  
128 PM PST Mon Feb 19 2018

.SYNOPSIS...

A few more isolated rain and snow showers could develop late this afternoon or evening, otherwise clear to partly cloudy and much cooler overnight with frost and freezing conditions in the valleys. The low pressure trough responsible will move east on Tuesday, but several more weaker systems will slide south over the region during the latter half of the week, keeping temperatures below average, and possibly sparking more periods of scattered, light showers. The winds will continue quite gusty through this evening, then weaken late tonight. Continued cool on Tuesday, followed by slight warming midweek. Dry and a little warmer next weekend.

&&

.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE...  
SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO  
COUNTIES...

At midday...Satellite imagery showed fair weather cumulus over San Diego County, and developing clouds to the NW over the mts of LA/San Bernardino and Orange Counties, otherwise it was clear. Surface pressure gradients were relaxing a bit to the deserts, but were still around 9 MBS KSN to SW NV. This was sufficient to support breezy conditions over much of the region with strong gusts of 50 MPH or more over the San Diego County Mts. A new storm precip summary has been posted to our website. Snow reports were all one inch or less.

Breezy conditions will continue into the evening most areas, while over the mts/deserts, gusts will still be of Advisory strength. Any high wind reports should be few, and confined to the windiest spots in the San Diego County Mts if anywhere. There will be another shot at some scattered rain and snow showers late today and this evening as the last disturbance rotates through the trough, then skies should clear away and winds drop off, especially in wind sheltered spots. This will allow the temps to fall to the freezing

mark or below in the valleys. Frost and Freeze Advisories/Warnings are in effect. the Winter Weather Advisory remain in effect over the mts this evening due to the strong winds. cold, and additional snow showers.

The cold low pressure trough that has settled into the Great Basin will begin to lift out later tonight and Tuesday. Winds will gradually decrease overnight, allowing sfc temps to fall rapidly. this has prompted frost advisories and freeze warnings in the

**February 19, 2018 Exceptional Event, Imperial County****Appendix A**

valleys. It will start out much colder tomorrow morning, but with plenty of sun expected, temps should warm back into the upper 50s and lower 60s west of the mts.

Any warming will be modest as both the GFS/ECMWF model runs are holding the longwave trough position over the West with strong high pressure over the SE U.S. There is no shortage of disturbances lined up to drop into the trough, with the next on possibility influencing our weather as soon as Wednesday. Low POPS are in the forecast by afternoon/evening, increasing into Thu with both 12Z model runs showing precip on SoCal. Once again, this type of system will not have sufficient moisture and instability for any heavy precip, and given the shallow depth of the moist layer, most would fall along and west of the mts.

Another break comes next weekend as a stronger wave appears to gather strength and drop south off the PacNW coast. There are considerable model differences in the deepening and track of this wave, but both the GFS/ECMWF suggest it will be able to generate precip over SoCal mid next week with a better fetch of moisture.

&&

.AVIATION...

192115Z...Coast and Valleys...SCT-BKN clouds with bases at or above 3500 feet MSL and unrestricted vis through 06Z Tue. Mostly clear with unrestricted vis after 06Z Tue. Areas of west winds 20-30 kt will occur near the coast through about 00Z Tue. Winds weaken after 00Z Tue.

Mountains and Deserts: SCT-BKN clouds on coastal slopes through this evening will bring local terrain obscuration between 3500-7000 feet MSL. Scattered clouds at or abv 5000 feet msl in the desert. Southwest to west winds 25-35 kt with gusts to 55 kt will continue over the mountain crests and some of the desert mountain slopes through this evening. This will cause mdt-strong up/downdrafts over and east of the mtns. Occasional vis reductions to 3-5sm in blowing dust and sand for some areas.

&&

.MARINE...

Northwest winds with gusts 25 to 30 kts and hazardous seas will continue through tonight. See the Marine Weather Message and Coastal Waters Forecast for details. No hazardous marine conditions are expected Tuesday into Thursday, but hazardous winds and seas are likely again late Thursday and Friday.

&&

.SKYWARN...

Skywarn activation is not requested. However weather spotters are encouraged to report significant weather conditions.

&amp;&amp;

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...Winter Weather Advisory until 10 PM PST this evening for  
Riverside County Mountains-San Bernardino County Mountains-  
San Diego County Mountains.

Wind Advisory until 6 PM PST this evening for Coachella Valley-  
San Diego County Deserts-San Gorgonio Pass Near Banning.

Frost Advisory from 10 PM this evening to 9 AM PST Tuesday for  
San Diego County Valleys-San Gorgonio Pass Near Banning.

Frost Advisory from 10 PM Tuesday to 8 AM PST Wednesday for San  
Bernardino and Riverside County Valleys-The Inland Empire.

Freeze Warning from 10 PM this evening to 9 AM PST Tuesday for  
San Bernardino and Riverside County Valleys-The Inland  
Empire.

PZ...Small Craft Advisory until 6 AM PST Tuesday for Coastal Waters  
from San Mateo Point to the Mexican Border and out to 30 nm-  
Waters from San Mateo point to the Mexican Border Extending  
30 to 60 nm out including San Clemente Island.

&amp;&amp;

\$\$

PUBLIC...jad  
AVIATION/MARINE...PG

# IOWA STATE UNIVERSITY

College of Ag  
Department of Agronomy

**Department of Agronomy**  
716 Farm House Ln  
Ames, IA 50011

2

289

WWUS75 KPSR 192102

NPWPSR

URGENT - WEATHER MESSAGE

National Weather Service Phoenix AZ

202 PM MST Mon Feb 19 2018

CAZ563-565-567-192215-

/O.EXP.KPSR.WI.Y.0004.000000T0000Z-180219T2100Z/

Salton Sea-Imperial County Southeast-Imperial Valley-

Including the cities of Desert Shores, Winterhaven, El Centro,  
Calexico, Alamorio, and Brawley

102 PM PST Mon Feb 19 2018

...WIND ADVISORY HAS EXPIRED...

Winds are weakening though breezy conditions will continue into  
the evening.

\$\$

AZZ553-192300-

/O.CON.KPSR.DU.Y.0002.000000T0000Z-180219T2300Z/

Northwest Pinal County-

Including the cities of Casa Grande, Cactus Forest, Florence,  
and Coolidge

202 PM MST Mon Feb 19 2018

...BLOWING DUST ADVISORY REMAINS IN EFFECT UNTIL 4 PM MST THIS  
AFTERNOON...

\* AFFECTED AREA...Parts of northern Pinal County including  
Interstate 10 and Highway 347.

\* TIMING...This Afternoon

\* WINDS...Southwest 20 to 30 mph with gust to 35 mph

\* VISIBILITY...locally falling below 1 mile

\* IMPACTS...Blowing dust will make driving difficult with sudden  
reductions in visibility possible.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

Be ready for a sudden drop in visibility. If you encounter

blowing dust or blowing sand on the roadway or see it approaching, pull off the road as far as possible and put your vehicle in park. Turn the lights all the way off and keep your foot off the brake pedal.

Remember, pull aside, stay alive.

&&

\$\$

CAZ562-566-200000-  
/O.CON.KPSR.WI.Y.0004.000000T0000Z-180220T0000Z/  
Imperial County Southwest-Imperial County West-  
Including the cities of Mountain Spring, Coolidge Springs,  
Salton City, Winona, Coyote Wells, Ocotillo, and Plaster City  
102 PM PST Mon Feb 19 2018

...WIND ADVISORY REMAINS IN EFFECT UNTIL 4 PM PST THIS  
AFTERNOON...

\* AFFECTED AREA...Southwest Imperial County including Interstate  
8.

\* TIMING...Now through this evening.

\* WINDS...West winds 30 to 40 mph with gusts up to 50 mph.

\* IMPACTS...Strong winds in far southwestern Imperial County  
have created difficult and hazardous driving conditions,  
especially for high profile vehicles. Areas of blowing dust  
may also lead to sharply reduced visibilities.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between  
30 and 40 mph are expected, or wind gusts of between 40 and  
58 mph. Winds this strong can make driving difficult, especially  
for high profile vehicles. In addition, strong winds over desert  
areas could result in briefly lowered visibilities to well under  
a mile at times in blowing dust or blowing sand. Use extra  
caution.

&&

\$\$

CAZ560-200000-  
/O.CON.KPSR.WI.Y.0004.000000T0000Z-180220T0000Z/



Joshua Tree NP West-  
Including the cities of Cottonwood Visitor and Lost Horse-Keys  
Village  
102 PM PST Mon Feb 19 2018

...WIND ADVISORY REMAINS IN EFFECT UNTIL 4 PM PST THIS  
AFTERNOON...

\* AFFECTED AREA...Joshua Tree National Park.

\* TIMING...Now through this evening.

\* WINDS...West winds 25 to 35 mph with gusts up to 45 mph.

\* IMPACTS...Strong winds in Joshua Tree National Park will  
create difficult and hazardous driving conditions, especially  
for high profile vehicles. Areas of blowing dust may also lead  
to sharply reduced visibilities.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between  
30 and 40 mph are expected, or wind gusts of between 40 and  
58 mph. Winds this strong can make driving difficult, especially  
for high profile vehicles. In addition, strong winds over desert  
areas could result in briefly lowered visibilities to well under  
a mile at times in blowing dust or blowing sand. Use extra  
caution.

&&

\$\$

AZZ557-558-563-200400-  
/O.CON.KPSR.WI.Y.0004.000000T0000Z-180220T0400Z/  
Mazatzal Mountains-Pinal/Superstition Mountains-  
Southeast Gila County-  
Including the city of Sunflower  
202 PM MST Mon Feb 19 2018

...WIND ADVISORY REMAINS IN EFFECT UNTIL 9 PM MST THIS EVENING...

\* AFFECTED AREA...The higher terrain of eastern Maricopa, Pinal  
and southern Gila Counties including the Mazatzal and  
Superstition Mountains.

\* TIMING...Now through this evening.

\* WINDS...West winds 25 to 35 mph with gusts up to 50 mph.

\* IMPACTS...Strong winds will create difficult and hazardous driving conditions, especially for high profile vehicles.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

&&

\$\$

# IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

## Department of Agronomy

716 Farm House Ln

Ames, IA 50011

[akrherz@iastate.edu](mailto:akrherz@iastate.edu)

515-294-5978 phone



Facebook



Twitter



Github



YouTube

☐

105

FXUS65 KPSR 192110

AFDPSR

Area Forecast Discussion

National Weather Service Phoenix AZ

210 PM MST Mon Feb 19 2018

.SYNOPSIS...

Unusually cool temperatures will prevail over the area Tuesday and Wednesday as a storm system exits the region. Winds will weaken during the evening and overnight hours as light rain and snow shifts southeast. Colder than normal conditions will continue into the weekend before finally warming back to near average early next week.

&&

.DISCUSSION...

A pronounced PV anomaly was driving down the Sierra chain and centered over southern Nevada this afternoon. An impressive 100kt H5 jet was rounding the basal portion of the trough axis translating the greatest height falls (10-18dm), cold advection aloft, and vorticity advection into northern Arizona. While veered boundary layer winds were scouring moisture from the forecast area into eastern Arizona and the best frontogenetical forcing aligned along the northern AZ CAA axis, favorable orographic flow continued north of Phoenix such that scattered low topped convective showers repeatedly have developed over ridge tops.

A steep low level frontal boundary can be seen in multiple satellite channels nearly bisecting the CWA this afternoon; and this front will continue to rapidly surge through the area, clearing into SE Arizona by this evening. Deep subsidence and incredibly dry air (single digit dewpoints) with veering winds will overspread the area, quickly cutting off available moisture and better orographic trajectories. In addition given the orientation of the overall trough axis and additional shortwave energy filling into the trough base this evening, the post frontal pressure gradient will weaken rather abruptly late this afternoon; and other than enhanced winds across ridge tops near the jet core, surface wind speeds will subside at lower elevations after sunset. However in the meantime, gusty winds will pick up some dust in the pre-frontal zone though recent rainfall may hold down a more expansive dust problem.

Colder and much drier air will have fully flooded our area Tuesday, and 850 mb temperatures only around 1-2 C will translate into highs only in the mid-50s! This is despite the fact skies will be crystal

clear under late February sun. Believe it or not, this could match or exceed the coldest day so far this winter (which was 57 degrees on December 21st). Temperatures will plummet Tuesday night after sunset under clear skies and light winds. Based on historical trends following strong cold fronts, have hedged the forecast towards raw guidance resulting in widespread 30s by Wednesday morning in the lower deserts. In fact, the coldest lower elevation locations will likely drop into the upper 20s during this period.

The general long wave trough is forecast to stick around through at least Friday. However, the warm February sun will undoubtedly modify this airmass on both Wednesday and Thursday bringing a bit of warming each day. Yet another shortwave will rotate through this trough come Friday, which looks to be relatively cold in nature, but will not be packing much in the way of moisture. PWs are forecast to be around 0.5 inches at best, but strong PVA forcing may accompany this trough if indeed it comes to fruition. Really, the main impact would be some breezy conditions along with some light snowfall above 4000 ft. However, there are still model disagreements with the ECMWF & GEFS offering a much drier solution than the GFS.

Quasi-zonal flow develops for the weekend and possibly into early next week bringing tranquil weather. This pattern would allow temperatures to gradually rise back to near normal while winds stay relatively light.

&&

.AVIATION...

South-Central Arizona including KPHX, KIWA, and KSDL:

Gusty winds and low ceilings will be the two main aviation impacts through the TAF period. An abundance of low-level moisture has resulted in SCT to BKN cloud decks in the 4 to 6 kft range. These clouds decks will gradually lift and dissipate throughout the day, with mostly clear skies expected overnight. A chance for showers will persist through most of the day but will be confined primarily north and east of Phoenix terminals. Southwest winds with gusts to 30 kts will be possible this morning through around midnight. Thereafter winds will subside and remain out of the west.

Southeast California/Southwest Arizona including KIPL and KBLH:

Main aviation weather impact will be the windy conditions and blowing dust. Winds will be out of the northwest with gusts up to 30 to 40 kts, particularly at KIPL. These gusty winds will result in areas of blowing dust and associated reductions in visibility through late this evening. Thereafter winds will subside. Outside of any dust, skies will be clear.

Aviation Discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Wednesday through Sunday:

A series of low pressure systems will move through the Desert Southwest through the weekend. This will help to reinforce the below normal temperatures across the region, while there will only be a slight chance of precipitation with the system Friday and Friday night. Below normal RHs are also expected particularly Wednesday, though winds will remain below critical thresholds through the period. A warming trend is likely by Sunday, though temperature will remain below average.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...Blowing Dust Advisory until 4 PM MST this afternoon for AZZ553.

Wind Advisory until 9 PM MST this evening for AZZ557-558-563.

CA...Wind Advisory until 4 PM PST this afternoon for CAZ560-562-566.

&&

\$\$

Visit us on Facebook, Twitter, and at [weather.gov/phoenix](http://weather.gov/phoenix)

DISCUSSION...MO/Wilson

AVIATION..Hernandez

FIRE WEATHER...Hirsch

**IOWA STATE  
UNIVERSITY**

College of Ag

┌  
249  
WWUS75 KPSR 192310  
NPWPSR

URGENT - WEATHER MESSAGE  
National Weather Service Phoenix AZ  
410 PM MST Mon Feb 19 2018

AZZ553-200015-  
/O.EXP.KPSR.DU.Y.0002.000000T0000Z-180219T2300Z/  
/O.NEW.KPSR.DU.Y.0003.180219T2310Z-180220T0000Z/  
Northwest Pinal County-  
Including the cities of Casa Grande, Cactus Forest, Florence,  
and Coolidge  
410 PM MST Mon Feb 19 2018

...BLOWING DUST ADVISORY NOW IN EFFECT UNTIL 5 PM MST THIS  
AFTERNOON...

The National Weather Service in Phoenix has issued a Blowing Dust  
Advisory, which is in effect until 5 PM MST this afternoon.

- \* AFFECTED AREA...Parts of northern Pinal County including  
Interstate 10 and Highway 347.
- \* TIMING...Until 5 pm.
- \* WINDS...Southwest 20 to 30 mph with gusts of 30 to 40 mph.
- \* VISIBILITY...Locally falling below 1 mile.
- \* IMPACTS...Blowing dust will make driving difficult with sudden  
reductions in visibility possible. In addition, the strong winds  
will make for more difficult vehicle handling - especially for  
high profile vehicles such as commercial trucks and RVs.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

Be ready for a sudden drop in visibility. If you encounter  
blowing dust or blowing sand on the roadway or see it  
approaching, pull off the road as far as possible and put your  
vehicle in park. Turn the lights all the way off and keep your  
foot off the brake pedal.

Remember, pull aside, stay alive.

&&

\$\$

CAZ562-566-200015-  
/O.CON.KPSR.WI.Y.0004.000000T0000Z-180220T0000Z/  
Imperial County Southwest-Imperial County West-

**February 19, 2018 Exceptional Event, Imperial County**

Including the cities of Mountain Spring, Coolidge Springs,  
Salton City, Winona, Coyote Wells, Ocotillo, and Plaster City  
310 PM PST Mon Feb 19 2018

...WIND ADVISORY REMAINS IN EFFECT UNTIL 4 PM PST THIS  
AFTERNOON...

- \* AFFECTED AREA...Southwest Imperial County including Interstate 8.
- \* TIMING...Now through this evening.
- \* WINDS...West winds 30 to 40 mph with gusts up to 50 mph.
- \* IMPACTS...Strong winds in far southwestern Imperial County have created difficult and hazardous driving conditions, especially for high profile vehicles. Areas of blowing dust may also lead to sharply reduced visibilities.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

&&

\$\$

CAZ560-200015-

/O.CON.KPSR.WI.Y.0004.000000T0000Z-180220T0000Z/

Joshua Tree NP West-

Including the cities of Cottonwood Visitor and Lost Horse-Keys  
Village

310 PM PST Mon Feb 19 2018

...WIND ADVISORY REMAINS IN EFFECT UNTIL 4 PM PST THIS  
AFTERNOON...

- \* AFFECTED AREA...Joshua Tree National Park.
- \* TIMING...Now through this evening.
- \* WINDS...West winds 25 to 35 mph with gusts up to 45 mph.
- \* IMPACTS...Strong winds in Joshua Tree National Park will create difficult and hazardous driving conditions, especially for high profile vehicles. Areas of blowing dust may also lead to sharply reduced visibilities.

**February 19, 2018 Exceptional Event, Imperial County****Appendix A****PRECAUTIONARY/PREPAREDNESS ACTIONS...**

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

&amp;&amp;

\$\$

AZZ557-558-563-200400-  
/O.CON.KPSR.WI.Y.0004.000000T0000Z-180220T0400Z/  
Mazatzal Mountains-Pinal/Superstition Mountains-  
Southeast Gila County-  
Including the city of Sunflower  
410 PM MST Mon Feb 19 2018

...WIND ADVISORY REMAINS IN EFFECT UNTIL 9 PM MST THIS EVENING...

\* AFFECTED AREA...The higher terrain of eastern Maricopa, Pinal and southern Gila Counties including the Mazatzal and Superstition Mountains.

\* TIMING...Now through this evening.

\* WINDS...West winds 25 to 35 mph with gusts up to 50 mph.

\* IMPACTS...Strong winds will create difficult and hazardous driving conditions, especially for high profile vehicles.

**PRECAUTIONARY/PREPAREDNESS ACTIONS...**

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

&amp;&amp;

\$\$



## February 19, 2018 Exceptional Event, Imperial County

## Appendix A

```

[
656
ASUS66 KSGX 200025
RTPSGX

:SOUTHWESTERN CALIFORNIA TEMPERATURE AND PRECIPITATION SUMMARY
:NATIONAL WEATHER SERVICE SAN DIEGO CA
:430 PM PST MON FEB 19 2018
:
:***** PRELIMINARY *****
:
:18 HOUR HIGH AND LOW TEMPERATURES AS OF 4 PM TODAY.
:PRECIPITATION FOR THE PAST 24 HOURS.  M DENOTES MISSING.
:  T DENOTES TRACE OF PRECIPITATION
:
.BR SGX 0219 P DH16/TAIRZS/TAIRZI/PPDRZZ/SDIRZZ
:
: ID :      STATION          ELEV : HIGH / LOW /  PCPN / SNODEP
:      FEET                      INCHES
:
:      ...COASTAL AREAS...
:
SDYBL:      YORBA LINDA      370 :  59 /  47 /  0.00 /
FUL  :      FULLERTON AIRPORT  96 :  61 /  52 /  0.00 /
ANAC1:      ANAHEIM        335 :   M /   M /   M /
STAC1:      SANTA ANA       135 :  59 /  52 /  0.00 /
SDHTB:      HUNTINGTON BEACH   5 :  59 /  50 /  0.00 /
SNA  :      JOHN WAYNE AIRPORT 55 :  58 /  52 /   T /
3L3  :      NEWPORT BEACH    10 :  61 /  52 /  0.00 /
LAGC1:      LAGUNA BEACH     35 :  59 /  54 /  0.00 /
SDDPC:      DANA POINT      305 :   M /   M /   M /
SDFRH:      LAKE FOREST     970 :  57 /  47 /  0.00 /
L34  :      OCEANSIDE HARBOR  10 :  57 /  54 /  0.00 /
OKB  :      OCEANSIDE AIRPORT 28 :  60 /  54 /   T /
SDVIS:      VISTA          330 :  56 /  51 /  0.00 /
CRQ  :      CARLSBAD AIRPORT 328 :  58 /  53 /  0.00 /
SDETS:      ENCINITAS      270 :  58 /  52 /  0.00 /
SOL  :      SOLANA BEACH     75 :   M /   M /   M /
SDDMB:      DEL MAR BEACH    10 :  59 /  55 /  0.00 /
NKX  :      MIRAMAR        477 :  62 /  56 /  0.00 /
MYF  :      MONTGOMERY FIELD 420 :  59 /  53 /   T /
SAN  :      SAN DIEGO INT'L AP 15 :  61 /  55 /   T /
L13  :      CABRILLO NATL MNMT 364 :   M /   M /   M /
SDNAC:      NATIONAL CITY    25 :  60 /  55 /  0.01 /
CVAC1:      CHULA VISTA     65 :  59 /  54 /  0.00 /
NRS  :      IMPERIAL BEACH   23 :  61 /  56 /  0.00 /
SDM  :      BROWN FIELD     525 :  59 /  52 /  0.05 /
:
:      ...INLAND AREAS...
:
ONT  :      ONTARIO         943 :  57 /  45 /  0.01 /
CNO  :      CHINO          652 :  60 /  45 /   T /
SDALO:      RANCHO CUCAMONGA 1940 :  54 /  41 /  0.00 /
SBYC1:      SAN BERNARDINO 1050 :  57 /  47 /   T /

```

**February 19, 2018 Exceptional Event, Imperial County****Appendix A**

AJO :	CORONA	531 :	58 /	49 /	T /	
RAL :	RIVERSIDE AIRPORT	818 :	57 /	47 /	T /	
UCRC1:	RIVERSIDE	986 :	55 /	48 /	0.00 /	
RIV :	RIVERSIDE MARCH	1542 :	54 /	43 /	T /	
BUO :	BEAUMONT	2680 :	49 /	41 /	0.05 /	
SDLEL:	LAKE ELSINORE	1275 :	59 /	49 /	0.00 /	
SDHET:	HEMET	2050 :	52 /	43 /	0.00 /	
SDTEC:	TEMECULA	1020 :	57 /	48 /	0.00 /	
SDFBK:	FALLBROOK	680 :	58 /	50 /	0.00 /	
VCFC1:	VALLEY CENTER	1312 :	55 /	46 /	0.00 /	
SDSMP:	SAN MARCOS	630 :	57 /	51 /	0.00 /	
ESCC1:	ESCONDIDO	645 :	58 /	51 /	0.00 /	
PSQC1:	SAN PASQUAL VALLEY	255 :	58 /	51 /	0.00 /	
RNM :	RAMONA AIRPORT	1393 :	56 /	46 /	T /	
SGX :	RANCHO BERNARDO	690 :	57 /	50 /	0.00 /	
SDPOY:	POWAY	597 :	58 /	51 /	0.00 /	
ALPC1:	ALPINE	1695 :	53 /	44 /	0.07 /	
SDLAM:	LA MESA	500 :	56 /	51 /	0.00 /	
SDSNL:	SANTEE	435 :	58 /	52 /	0.00 /	
ELJC1:	EL CAJON	405 :	58 /	53 /	0.01 /	
SDRSC:	RANCHO SAN DIEGO	400 :	59 /	52 /	0.00 /	
LMGC1:	LEMON GROVE	427 :	57 /	52 /	0.00 /	
:						
:	...MOUNTAIN AREAS...					
:						
ECSC1:	EL CARISO	2730 :	48 /	40 /	0.00 /	
SDWRT:	WRIGHTWOOD	5980 :	33 /	23 /	0.00 /	M
SDARN:	LAKE ARROWHEAD	5180 :	38 /	27 /	0.11 /	
BBLC1:	BIG BEAR LAKE	6768 :	30 /	18 /	0.00 /	M
SDBDN:	BALDWIN LAKE	6770 :	30 /	19 /	0.00 /	
SDAOK:	ANGELUS OAKS	5800 :	33 /	23 /	0.00 /	
IDYC1:	IDYLLWILD	5380 :	36 /	29 /	0.00 /	M
NZAC1:	ANZA	3939 :	42 /	34 /	0.03 /	
PYNC1:	PINYON PINES	4060 :	48 /	35 /	0.00 /	
PLRC1:	PALOMAR MOUNTAIN	5550 :	M /	M /	M /	M
JULC1:	JULIAN	4240 :	40 /	32 /	0.14 /	
MLNC1:	MOUNT LAGUNA	5920 :	49 /	28 /	0.03 /	M
CPMC1:	CAMPO COOP	2615 :	50 /	40 /	0.02 /	
:						
:	...DESERT AREAS...					
:						
HESC1:	HESPERIA	3055 :	46 /	34 /	0.00 /	M
APLC1:	APPLE VALLEY	2780 :	46 /	34 /	0.00 /	M
PSP :	PALM SPRINGS	425 :	64 /	56 /	0.00 /	
IDOC1:	INDIO	-21 :	63 /	54 /	0.00 /	
TRM :	THERMAL	-117 :	68 /	59 /	0.00 /	
BROC1:	BORREGO SPRINGS	805 :	59 /	52 /	0.00 /	
SDOCL:	OCOTILLO WELLS	149 :	64 /	55 /	0.00 /	
TYEC1:	JOSHUA TREE N.P.	1975 :	M /	M /	M /	M
BLH :	BLYTHE	397 :	64 /	52 /	0.00 /	
IPL :	IMPERIAL	-56 :	66 /	54 /	0.00 /	
.END						

**February 19, 2018 Exceptional Event, Imperial County****Appendix A**

THESE DATA ARE PRELIMINARY AND HAVE NOT UNDERGONE FINAL QUALITY CONTROL BY THE NATIONAL CLIMATIC DATA CENTER (NCDC). THEREFORE, THESE DATA ARE SUBJECT TO REVISION. FINAL AND CERTIFIED CLIMATE DATA CAN BE ACCESSED AT [WWW.NCDC.NOAA.GOV](http://WWW.NCDC.NOAA.GOV).

\$\$

# IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

## Department of Agronomy

716 Farm House Ln

Ames, IA 50011

[akrherz@iastate.edu](mailto:akrherz@iastate.edu)

515-294-5978 phone



Facebook



Twitter



Github



YouTube



RSS

Copyright © 2001-2019

Iowa State University

of Science and Technology

All rights reserved.

Non-discrimination Policy

Privacy Policy

Digital Access & Accessibility

┌  
357  
WWUS75 KPSR 200000  
NPWPSR

URGENT - WEATHER MESSAGE  
National Weather Service Phoenix AZ  
500 PM MST Mon Feb 19 2018

AZZ553-200100-  
/O.EXP.KPSR.DU.Y.0003.000000T0000Z-180220T0000Z/  
Northwest Pinal County-  
Including the cities of Casa Grande, Cactus Forest, Florence,  
and Coolidge  
500 PM MST Mon Feb 19 2018

...BLOWING DUST ADVISORY WILL EXPIRE AT 5 PM MST THIS AFTERNOON...

ADVISORY LEVEL DUST HAS DISSIPATED IN THE AREA.

\$\$

CAZ562-566-200100-  
/O.EXP.KPSR.WI.Y.0004.000000T0000Z-180220T0000Z/  
Imperial County Southwest-Imperial County West-  
Including the cities of Mountain Spring, Coolidge Springs,  
Salton City, Winona, Coyote Wells, Ocotillo, and Plaster City  
400 PM PST Mon Feb 19 2018

...WIND ADVISORY WILL EXPIRE AT 4 PM PST THIS AFTERNOON...

WINDS HAVE FALLEN BELOW ADVISORY CRITERIA.

\$\$

CAZ560-200100-  
/O.EXP.KPSR.WI.Y.0004.000000T0000Z-180220T0000Z/  
Joshua Tree NP West-  
Including the cities of Cottonwood Visitor and Lost Horse-Keys  
Village  
400 PM PST Mon Feb 19 2018

...WIND ADVISORY WILL EXPIRE AT 4 PM PST THIS AFTERNOON...

WINDS HAVE FALLEN BELOW ADVISORY CRITERIA.

\$\$

AZZ557-558-563-200400-  
/O.CON.KPSR.WI.Y.0004.000000T0000Z-180220T0400Z/  
Mazatzal Mountains-Pinal/Superstition Mountains-  
Southeast Gila County-  
Including the city of Sunflower  
500 PM MST Mon Feb 19 2018

...WIND ADVISORY REMAINS IN EFFECT UNTIL 9 PM MST THIS EVENING...

\* AFFECTED AREA...The higher terrain of eastern Maricopa, Pinal and southern Gila Counties including the Mazatzal and Superstition Mountains.

\* TIMING...Now through this evening.

\* WINDS...West winds 25 to 35 mph with gusts up to 50 mph.

\* IMPACTS...Strong winds will create difficult and hazardous driving conditions, especially for high profile vehicles.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

&&

\$\$

# IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

## Department of Agronomy

716 Farm House Ln

Ames, IA 50011

akrherz@iastate.edu

515-294-5978 phone



Facebook

474  
 NOUS46 KSGX 200116  
 PNSSGX  
 CAZ043-048-050-055>058-060>062-065-552-554-201310-

Public Information Statement  
 National Weather Service San Diego CA  
 510 PM PST Mon Feb 19 2018

...Highest Observed Wind Gusts in the Past 24 Hours...

.....Top 10 Wind Gust Reports.....

1. Volcan Mountain	74 MPH	0220 AM 02/19	5154
2. Harrison Park	72 MPH	0220 AM 02/19	4861
3. Burns Canyon	68 MPH	0551 AM 02/19	6284
4. Boulevard (1 W)	66 MPH	1050 AM 02/19	3404
Whitewater Raws (2 N)	66 MPH	0750 PM 02/18	2546
6. Boulevard (5 NW)	62 MPH	1130 AM 02/19	4114
Julian (2 SE)	62 MPH	0415 AM 02/19	4487
8. Descanso (8 NE)	61 MPH	0330 AM 02/19	4740
9. Palm Desert (5 S)	59 MPH	0710 AM 02/19	980
10. Borrego Springs (7 SE)	56 MPH	0533 AM 02/19	587

Location	Speed	Time/Date	Elevation (ft.)
----------	-------	-----------	-----------------

...Santa Ana Mountains and Foothills...

Fremont Canyon	39 MPH	0251 PM 02/19	1780
Corona	36 MPH	0511 PM 02/18	1951
Santiago Peak	35 MPH	0835 AM 02/19	4135
El Cariso	35 MPH	0320 PM 02/19	2733

...San Gorgonio Pass Near Banning...

Whitewater Raws (2 N)	66 MPH	0750 PM 02/18	2546
Thousand Palms (5 NNE)	46 MPH	0538 AM 02/19	1066
Cabazon	37 MPH	0214 PM 02/19	2154

...San Diego County Mountains...

Volcan Mountain	74 MPH	0220 AM 02/19	5154
Harrison Park	72 MPH	0220 AM 02/19	4861
Boulevard (1 W)	66 MPH	1050 AM 02/19	3404
Boulevard (5 NW)	62 MPH	1130 AM 02/19	4114
Julian (2 SE)	62 MPH	0415 AM 02/19	4487
Descanso (8 NE)	61 MPH	0330 AM 02/19	4740
Ranchita (1 NE)	53 MPH	0707 AM 02/19	4415
Ranchita	51 MPH	0420 AM 02/19	4128
4 E Pine Valley	50 MPH	0131 AM 02/19	6048
Julian Fire Station	49 MPH	0255 AM 02/19	4238
Julian (4 W)	45 MPH	0400 PM 02/19	3738

**February 19, 2018 Exceptional Event, Imperial County****Appendix A**

Warner Springs (4 SE)	45 MPH	0300 PM 02/19	3242
Guatay	45 MPH	0220 PM 02/19	3892
Campo	45 MPH	1149 AM 02/19	2630
5 S Julian	44 MPH	0445 AM 02/19	4637
Julian (1 ESE)	43 MPH	0440 AM 02/19	4201
Boulevard (8 NW)	43 MPH	0320 PM 02/19	4000
Warner Springs (4 SW)	43 MPH	0140 PM 02/19	2803
Campo (3 NW)	40 MPH	1100 AM 02/19	2848
Sill Hill	40 MPH	0210 AM 02/19	3556
Wynola West	40 MPH	0110 PM 02/19	3553
Santa Ysabel (2 SE)	39 MPH	1206 PM 02/19	3580
Julian (5 NW)	39 MPH	0150 PM 02/19	4284
Santa Ysabel (1 SE)	39 MPH	1250 PM 02/19	3314
Oak Grove N	39 MPH	0200 PM 02/19	2756
Pine Valley (5 S)	39 MPH	0240 PM 02/19	3263
Warner Springs (3 SW)	39 MPH	0200 PM 02/19	2842
Pine Hills	38 MPH	0204 PM 02/19	3651
Campo (3 NE)	38 MPH	1200 PM 02/19	2886
Viejas Grade	37 MPH	0130 PM 02/19	3211
Santa Ysabel (2 SW)	37 MPH	0150 PM 02/19	3291
Campo (7 NE)	37 MPH	0404 PM 02/19	3268
Campo (1 SW)	37 MPH	0140 PM 02/19	2433
Pine Valley SE	37 MPH	0350 AM 02/19	3939
Descanso (1 SW)	36 MPH	1230 PM 02/19	3394
Mt Laguna (3 W)	36 MPH	0210 AM 02/19	5030
Descanso	36 MPH	0204 PM 02/19	3567
Warner Springs (3 SE)	36 MPH	0210 PM 02/19	3815
Pine Valley (1 SE)	36 MPH	0450 AM 02/19	4010
Chihuahua Valley	36 MPH	0250 PM 02/19	4610
Santa Ysabel (6 NW)	35 MPH	0130 PM 02/19	3349

**...San Diego County Inland Valleys...**

Ramona (1 SW)	54 MPH	1224 AM 02/19	1420
Escondido (2 NE)	50 MPH	1041 AM 02/19	705
Otay Mountain	46 MPH	0314 PM 02/19	3283
Round Potrero	41 MPH	1130 AM 02/19	2634
San Clemente (5 E)	41 MPH	0222 PM 02/19	810
Jamul (7 E)	40 MPH	0205 PM 02/19	3760
Roblar Canyon (Camp Pendleton)	40 MPH	0322 PM 02/19	915
Otay Mountain	39 MPH	0200 PM 02/19	3359
Dye Mountain	39 MPH	0150 PM 02/19	2998
Ramona Airport	38 MPH	0353 PM 02/19	1393
Potrero North	38 MPH	1120 AM 02/19	2302
Barona	38 MPH	0120 PM 02/19	1319
Barrett Junction (4 N)	37 MPH	0150 PM 02/19	2395
Lake San Marcos (3 SE)	36 MPH	0237 PM 02/19	540
Potrero	36 MPH	0250 PM 02/19	2360
1 NNW San Marcos	36 MPH	0210 PM 02/19	629
Ramona (3 N)	35 MPH	0252 PM 02/19	1835
Scripps Ranch	35 MPH	1220 PM 02/19	779
North Boulder Creek	35 MPH	0320 PM 02/19	3091
Lake Wohlford	35 MPH	0150 PM 02/19	1642
Sky Valley	35 MPH	0150 PM 02/19	2248

**February 19, 2018 Exceptional Event, Imperial County****Appendix A**

## ...San Diego County Deserts...

Borrego Springs (7 SE)	56 MPH	0533 AM 02/19	587
Julian (9 ESE)	53 MPH	0549 AM 02/19	2011
In Ko Pah	47 MPH	0710 AM 02/19	3221
3 NW Borrego Springs	45 MPH	1116 AM 02/19	2175
Borrego Springs (9 S)	43 MPH	0340 AM 02/19	768
Borrego Springs (2 E)	42 MPH	1010 AM 02/19	720
Ocotillo Wells (3 WNW)	38 MPH	0701 AM 02/19	390
Ocotillo Wells (1 SW)	37 MPH	0931 AM 02/19	137

## ...San Diego County Coastal Areas...

Carlsbad (2 W)	45 MPH	1019 AM 02/19	364
Del Mar	42 MPH	0440 AM 02/19	12
Red Beach Airport	39 MPH	0616 AM 02/19	88
Mission Beach	38 MPH	0454 AM 02/19	13
Mission Valley	35 MPH	0950 AM 02/19	319
Imperial Beach (NAS)	35 MPH	0630 AM 02/19	23

## ...San Bernardino and Riverside County Valleys-The Inland Empire...

Lake Mathews (1 SW)	42 MPH	0916 AM 02/19	1516
Highland Springs	42 MPH	0216 PM 02/19	2233
Temescal	38 MPH	0141 PM 02/19	1708
Sage	37 MPH	0214 PM 02/19	2560
Temecula (9 NE)	36 MPH	0250 PM 02/19	1775
Riverside Airport	36 MPH	1254 PM 02/19	818
Perris (2 NW)	35 MPH	0120 PM 02/19	1901
Ontario Airport	35 MPH	0947 AM 02/19	947

## ...San Bernardino County Mountains...

Burns Canyon	68 MPH	0551 AM 02/19	6284
2 NNW Banning	46 MPH	1113 AM 02/19	3609
Mormon Rock	44 MPH	0916 PM 02/18	3300
Running Springs (2 NW)	42 MPH	1015 PM 02/18	6350
Big Bear Airport	40 MPH	1235 PM 02/19	6752
Big Bear (2 E)	38 MPH	1245 AM 02/19	6790
Fawnskin	37 MPH	0923 PM 02/18	7000
Rock Camp	37 MPH	0102 AM 02/19	4900

## ...Riverside County Mountains...

Pinyon Pines	50 MPH	0836 AM 02/19	4060
Mt San Jacinto	43 MPH	0353 AM 02/19	8584
Anza Southeast	43 MPH	1249 PM 02/19	3920
Mt San Jacinto Ranger Statio	43 MPH	1132 PM 02/18	8375
9 SE Mountain Center	42 MPH	0238 AM 02/19	4590
Pine Cove (8 NW)	40 MPH	0301 AM 02/19	4906
Banning (5 NNW)	37 MPH	0214 AM 02/19	3830
Anza	36 MPH	0154 PM 02/19	3939
Mountain Center	36 MPH	0317 PM 02/19	4701
Anza (5 NNE)	35 MPH	0141 PM 02/19	4599

## ...Orange County Inland...

1 W Placentia	40 MPH	0403 PM 02/19	247
---------------	--------	---------------	-----

## ...Orange County Coastal...



**February 19, 2018 Exceptional Event, Imperial County****Appendix A**

San Clemente	37 MPH	0418 PM 02/19	32
...Coachella Valley...			
Palm Desert (5 S)	59 MPH	0710 AM 02/19	980
Coachella	54 MPH	0817 AM 02/19	110
Thermal Airport	51 MPH	1211 AM 02/19	-118
Palm Springs Airport	48 MPH	1019 AM 02/19	474
Cathedral City (1 SW)	44 MPH	0752 AM 02/19	605
Thousand Palms	36 MPH	1050 AM 02/19	272
Thousand Palms (5 NE)	35 MPH	0941 AM 02/19	1089
...Apple and Lucerne Valleys...			
Lucerne Valley (1 SW)	50 MPH	1121 PM 02/18	3034
Means Lake	48 MPH	0526 AM 02/19	2818
Hesperia (5 SW)	46 MPH	1124 PM 02/18	3723
Victorville (5 N)	42 MPH	0240 PM 02/19	4650
Hesperia (4 SW)	41 MPH	1253 AM 02/19	3580
3 E Victorville	40 MPH	0509 AM 02/19	2746
Hesperia (2 E)	40 MPH	0926 PM 02/18	3051
Apple Valley Airport (KAPV)	40 MPH	0455 PM 02/18	3062
Victorville (6 SW)	40 MPH	0339 PM 02/19	3164
Victorville Airport	39 MPH	0245 PM 02/19	2884
Apple Valley (6 N)	38 MPH	0250 PM 02/19	3159
...Maritime Stations...			
San Clemente Basin Buoy	43 MPH	0550 AM 02/19	0
35 W Coronado	40 MPH	0600 AM 02/19	0

Observations are collected from a variety of sources with varying equipment and exposures. We thank all volunteer weather observers for their dedication. Not all data listed are considered official.

\$\$

Albright

# IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

## Department of Agronomy

716 Farm House Ln

Ames, IA 50011

2

207

WWUS76 KSGX 200129

NPWSGX

URGENT - WEATHER MESSAGE

National Weather Service San Diego CA

529 PM PST Mon Feb 19 2018

...NEAR FREEZING TEMPERATURES IN THE VALLEYS WITH AREAS OF FROST  
TONIGHT AND TUESDAY NIGHT...

.Continued breezy to windy this evening, then winds decreasing  
late tonight. With clear skies and light winds, temperatures will  
drop rapidly in wind-sheltered areas. Areas of frost are expected  
along with freezing conditions in portions of the Inland Empire.

CAZ048-200930-

/O.CON.KSGX.FZ.W.0001.180220T0600Z-180220T1700Z/

/O.CON.KSGX.FR.Y.0003.180221T0600Z-180221T1600Z/

San Bernardino and Riverside County Valleys-The Inland Empire-

Including the cities of Riverside, San Bernardino, Ontario,

Moreno Valley, Fontana, Rancho Cucamonga, and Corona

529 PM PST Mon Feb 19 2018

...FREEZE WARNING REMAINS IN EFFECT FROM 10 PM THIS EVENING TO  
9 AM PST TUESDAY...

...FROST ADVISORY REMAINS IN EFFECT FROM 10 PM TUESDAY TO 8 AM  
PST WEDNESDAY...

\* Temperature...Falling into the upper 20s to mid 30s tonight  
into Tuesday morning...and into the 30s tonight into Wednesday  
morning.

\* Duration...Several hours of temperatures sufficient for frost  
each night with 4 to 6 hours of near or below freezing  
conditions.

\* Location...Coldest in low-lying, wind-sheltered areas...  
especially in southern and eastern portions of the Inland  
Empire.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Freeze Warning means sub-freezing temperatures are imminent or  
highly likely. These conditions will kill crops and other  
sensitive vegetation.

A Frost Advisory means that widespread frost is expected.  
Sensitive outdoor plants may be killed if left uncovered.

&&

\$\$

CAZ065-200930-

/O.EXT.KSGX.WI.Y.0006.000000T0000Z-180220T0600Z/

/O.CON.KSGX.FR.Y.0002.180220T0600Z-180220T1700Z/

San Gorgonio Pass Near Banning-

Including the cities of Banning and Desert Hot Springs

529 PM PST Mon Feb 19 2018

...WIND ADVISORY NOW IN EFFECT UNTIL 10 PM PST THIS EVENING...

...FROST ADVISORY REMAINS IN EFFECT FROM 10 PM THIS EVENING TO  
9 AM PST TUESDAY...

\* Winds...Areas of west winds 25 to 35 mph with gusts to 50 mph.  
Isolated gusts to 60 mph in the northern Coachella Valley  
below the San Gorgonio Pass.

\* Temperatures...Falling into the lower to mid 30s late tonight  
into Tuesday morning with areas of frost possible.

\* Duration...Several hours with temperatures sufficient for  
frost late tonight into Tuesday morning.

\* Impacts...Strong winds will make travel difficult for high-  
profile vehicles. Sensitive outdoor plants may be killed if  
left uncovered.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that winds of 35 mph are expected. Winds  
this strong can make driving difficult...especially for high  
profile vehicles. Use extra caution.

A Frost Advisory means that widespread frost is expected.  
Sensitive outdoor plants may be killed if left uncovered.

&&

\$\$

CAZ061-062-200600-

/O.EXT.KSGX.WI.Y.0006.000000T0000Z-180220T0600Z/

Coachella Valley-San Diego County Deserts-

Including the cities of Indio, Palm Springs, Cathedral City,

Palm Desert, Palm Desert Country, La Quinta, Coachella,  
and Borrego Springs  
529 PM PST Mon Feb 19 2018

...WIND ADVISORY NOW IN EFFECT UNTIL 10 PM PST THIS EVENING...

- \* Winds...Areas of northwest to west winds 25 to 35 mph with isolated gusts to 50 mph.
- \* Location...Strongest gusts near the mountains...and in the Coachella Valley north and east of Interstate 10.
- \* Impacts...Strong winds will make travel difficult for high-profile vehicles. Blowing dust and sand may reduce visibility to near zero in a few locations.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that winds of 35 mph are expected. Winds this strong can make driving difficult...especially for high profile vehicles. Use extra caution.

&&

\$\$

CAZ050-200930-  
/O.CON.KSGX.FR.Y.0002.180220T0600Z-180220T1700Z/  
San Diego County Valleys-  
Including the cities of Escondido, San Marcos, and Poway  
529 PM PST Mon Feb 19 2018

...FROST ADVISORY REMAINS IN EFFECT FROM 10 PM THIS EVENING TO  
9 AM PST TUESDAY...

- \* Winds are expected to remain below Advisory criteria for the remainder of the day.
- \* Temperatures...Falling into the lower to mid 30s late tonight into Tuesday morning, with areas of frost possible. Coldest areas in the inland valleys near the foothills of the mountains.
- \* Impacts...Sensitive outdoor plants may be killed if left uncovered.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Frost Advisory means that widespread frost is expected.

┌  
502  
ASUS66 KSGX 200124  
RTPSGX

:SOUTHWESTERN CALIFORNIA TEMPERATURE AND PRECIPITATION SUMMARY  
:NATIONAL WEATHER SERVICE SAN DIEGO CA  
:530 PM PST MON FEB 19 2018  
:  
:\*\*\*\*\* UPDATED \*\*\*\*\*  
:  
:18 HOUR HIGH AND LOW TEMPERATURES AS OF 4 PM TODAY.  
:PRECIPITATION FOR THE PAST 24 HOURS ENDING AT 4 PM. M DENOTES MISSING.  
: T DENOTES TRACE OF PRECIPITATION  
:  
.BR SGX 0219 P DH16/TAIRZS/TAIRZI/PPDRZZ/SDIRZZ  
:  
: ID : STATION ELEV : HIGH / LOW / PCPN / SNODEP  
: FEET INCHES  
:  
: ...COASTAL AREAS...  
:  
SDYBL: YORBA LINDA 370 : 59 / 47 / 0.00 /  
FUL : FULLERTON AIRPORT 96 : 61 / 52 / 0.00 /  
ANAC1: ANAHEIM 335 : 65 / 50 / 0.00 /  
STAC1: SANTA ANA 135 : 59 / 52 / 0.00 /  
SDHTB: HUNTINGTON BEACH 5 : 59 / 50 / 0.00 /  
SNA : JOHN WAYNE AIRPORT 55 : 58 / 52 / T /  
3L3 : NEWPORT BEACH 10 : 61 / 52 / 0.00 /  
LAGC1: LAGUNA BEACH 35 : 59 / 54 / 0.00 /  
SDDPC: DANA POINT 305 : M / M / M /  
SDFRH: LAKE FOREST 970 : 57 / 47 / 0.00 /  
L34 : OCEANSIDE HARBOR 10 : 57 / 54 / 0.00 /  
OKB : OCEANSIDE AIRPORT 28 : 60 / 54 / T /  
SDVIS: VISTA 330 : 56 / 51 / 0.00 /  
CRQ : CARLSBAD AIRPORT 328 : 58 / 53 / 0.00 /  
SDETS: ENCINITAS 270 : 58 / 52 / 0.00 /  
SOL : SOLANA BEACH 75 : M / M / M /  
SDDMB: DEL MAR BEACH 10 : 59 / 55 / 0.00 /  
NKX : MIRAMAR 477 : 63 / 56 / 0.00 /  
MYF : MONTGOMERY FIELD 420 : 59 / 53 / T /  
SAN : SAN DIEGO INT'L AP 15 : 61 / 55 / T /  
L13 : CABRILLO NATL MNMT 364 : M / M / M /  
SDNAC: NATIONAL CITY 25 : 60 / 55 / 0.01 /  
CVAC1: CHULA VISTA 65 : 59 / 54 / 0.00 /  
NRS : IMPERIAL BEACH 23 : 61 / 56 / 0.00 /  
SDM : BROWN FIELD 525 : 59 / 52 / 0.05 /  
:  
: ...INLAND AREAS...  
:  
ONT : ONTARIO 943 : 57 / 45 / 0.01 /  
CNO : CHINO 652 : 60 / 45 / T /  
SDALO: RANCHO CUCAMONGA 1940 : 54 / 41 / 0.00 /  
SBYC1: SAN BERNARDINO 1050 : 57 / 47 / T /

**February 19, 2018 Exceptional Event, Imperial County****Appendix A**

AJO :	CORONA	531 :	58 /	49 /	T /	
RAL :	RIVERSIDE AIRPORT	818 :	57 /	47 /	T /	
UCRC1:	RIVERSIDE	986 :	55 /	48 /	0.00 /	
RIV :	RIVERSIDE MARCH	1542 :	54 /	43 /	T /	
BUO :	BEAUMONT	2680 :	49 /	41 /	0.05 /	
SDLEL:	LAKE ELSINORE	1275 :	59 /	49 /	0.00 /	
SDHET:	HEMET	2050 :	52 /	43 /	0.00 /	
SDTEC:	TEMECULA	1020 :	57 /	48 /	0.00 /	
SDFBK:	FALLBROOK	680 :	58 /	50 /	0.00 /	
VCFC1:	VALLEY CENTER	1312 :	55 /	46 /	0.00 /	
SDSMP:	SAN MARCOS	630 :	57 /	51 /	0.00 /	
ESCC1:	ESCONDIDO	645 :	58 /	51 /	0.00 /	
PSQC1:	SAN PASQUAL VALLEY	255 :	58 /	51 /	0.00 /	
RNM :	RAMONA AIRPORT	1393 :	56 /	46 /	T /	
SGX :	RANCHO BERNARDO	690 :	57 /	50 /	0.00 /	
SDPOY:	POWAY	597 :	58 /	51 /	0.00 /	
ALPC1:	ALPINE	1695 :	53 /	44 /	0.07 /	
SDLAM:	LA MESA	500 :	56 /	51 /	0.00 /	
SDSNL:	SANTEE	435 :	58 /	52 /	0.00 /	
ELJC1:	EL CAJON	405 :	58 /	53 /	0.01 /	
SDRSC:	RANCHO SAN DIEGO	400 :	59 /	52 /	0.00 /	
LMGC1:	LEMON GROVE	427 :	57 /	52 /	0.00 /	
:	...MOUNTAIN AREAS...					
ECSC1:	EL CARISO	2730 :	48 /	40 /	0.00 /	
SDWRT:	WRIGHTWOOD	5980 :	33 /	23 /	0.00 /	
SDARN:	LAKE ARROWHEAD	5180 :	38 /	27 /	0.11 /	1
BBLC1:	BIG BEAR LAKE	6768 :	30 /	18 /	0.00 /	
SDBDN:	BALDWIN LAKE	6770 :	30 /	19 /	0.00 /	
SDAOK:	ANGELUS OAKS	5800 :	33 /	23 /	0.00 /	
IDYC1:	IDYLLWILD	5380 :	36 /	29 /	0.00 /	
NZAC1:	ANZA	3939 :	42 /	34 /	0.03 /	
PYNC1:	PINYON PINES	4060 :	48 /	35 /	0.00 /	
PLRC1:	PALOMAR MOUNTAIN	5550 :	35 /	27 /	0.05 /	
JULC1:	JULIAN	4240 :	40 /	32 /	0.14 /	
MLNC1:	MOUNT LAGUNA	5920 :	34 /	28 /	0.03 /	0
CPMC1:	CAMPO COOP	2615 :	50 /	40 /	0.02 /	
:	...DESERT AREAS...					
HESC1:	HESPERIA	3055 :	46 /	34 /	0.00 /	0
APLC1:	APPLE VALLEY	2780 :	46 /	34 /	0.00 /	
PSP :	PALM SPRINGS	425 :	64 /	56 /	0.00 /	
IDOC1:	INDIO	-21 :	63 /	54 /	0.00 /	
TRM :	THERMAL	-117 :	68 /	59 /	T /	
BROC1:	BORREGO SPRINGS	805 :	59 /	52 /	0.00 /	
SDOCL:	OCOTILLO WELLS	149 :	64 /	55 /	0.00 /	
TYEC1:	JOSHUA TREE N.P.	1975 :	M /	M /	M /	
BLH :	BLYTHE	397 :	64 /	52 /	0.00 /	
IPL :	IMPERIAL	-56 :	66 /	54 /	0.00 /	
.END						

**February 19, 2018 Exceptional Event, Imperial County****Appendix A**

THESE DATA ARE PRELIMINARY AND HAVE NOT UNDERGONE FINAL QUALITY CONTROL BY THE NATIONAL CLIMATIC DATA CENTER (NCDC). THEREFORE, THESE DATA ARE SUBJECT TO REVISION. FINAL AND CERTIFIED CLIMATE DATA CAN BE ACCESSED AT [WWW.NCDC.NOAA.GOV](http://WWW.NCDC.NOAA.GOV).

\$\$

# IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

## Department of Agronomy

716 Farm House Ln

Ames, IA 50011

[akrherz@iastate.edu](mailto:akrherz@iastate.edu)

515-294-5978 phone



Facebook



Twitter



Github



YouTube



RSS

Copyright © 2001-2019

Iowa State University

of Science and Technology

All rights reserved.

Non-discrimination Policy

Privacy Policy

Digital Access & Accessibility

☐

673

FXUS65 KPSR 200039

AFDPSR

Area Forecast Discussion

National Weather Service Phoenix AZ

539 PM MST Mon Feb 19 2018

.UPDATE...

Updated Aviation section.

&&

.SYNOPSIS...

Unusually cool temperatures will prevail over the area Tuesday and Wednesday as a storm system exits the region. Winds will weaken during the evening and overnight hours as light rain and snow shifts southeast. Colder than normal conditions will continue into the weekend before finally warming back to near average early next week.

&&

.DISCUSSION...

A pronounced PV anomaly was driving down the Sierra chain and centered over southern Nevada this afternoon. An impressive 100kt H5 jet was rounding the basal portion of the trough axis translating the greatest height falls (10-18dm), cold advection aloft, and vorticity advection into northern Arizona. While veered boundary layer winds were scouring moisture from the forecast area into eastern Arizona and the best frontogenetical forcing aligned along the northern AZ CAA axis, favorable orographic flow continued north of Phoenix such that scattered low topped convective showers repeatedly have developed over ridge tops.

A steep low level frontal boundary can be seen in multiple satellite channels nearly bisecting the CWA this afternoon; and this front will continue to rapidly surge through the area, clearing into SE Arizona by this evening. Deep subsidence and incredibly dry air (single digit dewpoints) with veering winds will overspread the area, quickly cutting off available moisture and better orographic trajectories. In addition given the orientation of the overall trough axis and additional shortwave energy filling into the trough base this evening, the post frontal pressure gradient will weaken rather abruptly late this afternoon; and other than enhanced winds across ridge tops near the jet core, surface wind speeds will subside at lower elevations after sunset. However in the meantime, gusty winds will pick up some dust in the pre-frontal zone though



recent rainfall may hold down a more expansive dust problem.

Colder and much drier air will have fully flooded our area Tuesday, and 850 mb temperatures only around 1-2 C will translate into highs only in the mid-50s! This is despite the fact skies will be crystal clear under late February sun. Believe it or not, this could match or exceed the coldest day so far this winter (which was 57 degrees on December 21st). Temperatures will plummet Tuesday night after sunset under clear skies and light winds. Based on historical trends following strong cold fronts, have hedged the forecast towards raw guidance resulting in widespread 30s by Wednesday morning in the lower deserts. In fact, the coldest lower elevation locations will likely drop into the upper 20s during this period.

The general long wave trough is forecast to stick around through at least Friday. However, the warm February sun will undoubtedly modify this airmass on both Wednesday and Thursday bringing a bit of warming each day. Yet another shortwave will rotate through this trough come Friday, which looks to be relatively cold in nature, but will not be packing much in the way of moisture. PWs are forecast to be around 0.5 inches at best, but strong PVA forcing may accompany this trough if indeed it comes to fruition. Really, the main impact would be some breezy conditions along with some light snowfall above 4000 ft. However, there are still model disagreements with the ECMWF & GEFS offering a much drier solution than the GFS.

Quasi-zonal flow develops for the weekend and possibly into early next week bringing tranquil weather. This pattern would allow temperatures to gradually rise back to near normal while winds stay relatively light.

&&

.AVIATION...

South-Central Arizona including KPHX, KIWA, and KSDL:

A cold front moving through south-central Arizona late the afternoon/early evening has produced strong winds and lofted a considerable amount of dust. Surface visibilities will generally be in the 6SM-10SM range with local spots dipping to 4SM until about 02Z when winds weaken more significantly. With the lofted dust, expect significantly decreased slantwise visibilities. The lofted dust will slowly decrease tonight. Ceilings at FL070-090 will scatter out from west to east beginning about 02Z. Isolated very light showers/sprinkles before then. Surface wind directions will favor the northwest quadrant after 02Z but will hold onto a west component for much of the night. Winds above the surface will weaken tonight (most noticeably within the lowest 5kft) but will generally hold a west component.

Southeast California/Southwest Arizona including KIPL and KBLH:

West and northwest winds will continue to weaken this evening with only some isolated/scattered cumulus (mainly near the higher mountains). Lofted dust will cause reduced slantwise visibilities (especially over Yuma and Imperial Counties) into the early evening before slowly improving (lingering for several hours though).

Aviation Discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Wednesday through Sunday:

A series of low pressure systems will move through the Desert Southwest through the weekend. This will help to reinforce the below normal temperatures across the region, while there will only be a slight chance of precipitation with the system Friday and Friday night. Below normal RHs are also expected particularly Wednesday, though winds will remain below critical thresholds through the period. A warming trend is likely by Sunday, though temperature will remain below average.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...Wind Advisory until 9 PM MST this evening for AZZ557-558-563.

CA...None.

&&

\$\$

Visit us on Facebook, Twitter, and at [weather.gov/phoenix](http://weather.gov/phoenix)

DISCUSSION...MO/Wilson

AVIATION..Hernandez

FIRE WEATHER...Hirsch

「  
262  
FXUS66 KSGX 200141  
AFDSGX

Area Forecast Discussion  
National Weather Service San Diego CA  
541 PM PST Mon Feb 19 2018

.SYNOPSIS...

Isolated showers this evening, otherwise clear to partly cloudy and much cooler overnight with frost and freezing conditions in the valleys. The low pressure trough responsible will move east on Tuesday, but several more weaker systems will slide south over the region during the latter half of the week, keeping temperatures below average, and possibly sparking more periods of scattered, light showers. The winds will continue quite gusty through this evening, then weaken late tonight. Continued cool on Tuesday, followed by slight warming midweek. Dry and a little warmer next weekend.

&&

.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE...  
SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO  
COUNTIES...

At 5 PM winds remained gusty over the region and the Wind Advisory for the lower deserts has been extended through 10 PM this evening. A few light rain/snow showers were impacting the region still, resulting in chain controls in the San Bernardino County Mtns. Showers should remain possible through midnight, with minimal accumulation.

From Previous Discussion:

Winds will drop off tonight, this will allow the temps to fall to the freezing mark or below in the valleys. Frost and Freeze Advisories/Warnings are in effect. the Winter Weather Advisory remain in effect over the mts this evening due to the strong winds. cold, and additional snow showers.

The cold low pressure trough that has settled into the Great Basin will begin to lift out later tonight and Tuesday. Winds will gradually decrease overnight, allowing sfc temps to fall rapidly. this has prompted frost advisories and freeze warnings in the valleys. It will start out much colder tomorrow morning, but with plenty of sun expected, temps should warm back into the upper 50s and lower 60s west of the mts.

Any warming will be modest as both the GFS/ECMWF model runs are holding the longwave trough position over the West with strong high pressure over the SE U.S. There is no shortage of disturbances lined up to drop into the trough, with the next on possibility

**February 19, 2018 Exceptional Event, Imperial County**

influencing our weather as soon as Wednesday. Low POPS are in the forecast by afternoon/evening, increasing into Thu with both 12Z model runs showing precip on SoCal. Once again, this type of system will not have sufficient moisture and instability for any heavy precip, and given the shallow depth of the moist layer, most would fall along and west of the mts.

Another break comes next weekend as a stronger wave appears to gather strength and drop south off the PacNW coast. There are considerable model differences in the deepening and track of this wave, but both the GFS/ECMWF suggest it will be able to generate precip over SoCal mid next week with a better fetch of moisture.

&&

**.AVIATION...**

192115Z...Coast and Valleys...SCT-BKN clouds with bases at or above 3500 feet MSL and unrestricted vis through 06Z Tue. Mostly clear with unrestricted vis after 06Z Tue. Areas of west winds 20-30 kt will occur near the coast through about 00Z Tue. Winds weaken after 00Z Tue.

Mountains and Deserts: SCT-BKN clouds on coastal slopes through this evening will bring local terrain obscuration between 3500-7000 feet MSL. Scattered clouds at or abv 5000 feet msl in the desert. Southwest to west winds 25-35 kt with gusts to 55 kt will continue over the mountain crests and some of the desert mountain slopes through this evening. This will cause mdt-strong up/downdrafts over and east of the mtns. Occasional vis reductions to 3-5sm in blowing dust and sand for some areas.

&&

**.MARINE...**

Northwest winds with gusts 25 to 30 kts and hazardous seas will continue through tonight. See the Marine Weather Message and Coastal Waters Forecast for details. No hazardous marine conditions are expected Tuesday into Thursday, but hazardous winds and seas are likely again late Thursday and Friday.

&&

**.SKYWARN...**

Skywarn activation is not requested. However weather spotters are encouraged to report significant weather conditions.

&&

**.SGX WATCHES/WARNINGS/ADVISORIES...**

CA...Winter Weather Advisory until 10 PM PST this evening for  
Riverside County Mountains-San Bernardino County Mountains-  
San Diego County Mountains.

Frost Advisory from 10 PM Tuesday to 8 AM PST Wednesday for San

**February 19, 2018 Exceptional Event, Imperial County**  
Bernardino and Riverside County Valleys-The Inland Empire.**Appendix A**

Freeze Warning from 10 PM this evening to 9 AM PST Tuesday for San Bernardino and Riverside County Valleys-The Inland Empire.

Wind Advisory until 10 PM PST this evening for Coachella Valley-San Diego County Deserts-San Gorgonio Pass Near Banning.

Frost Advisory from 10 PM this evening to 9 AM PST Tuesday for San Diego County Valleys-San Gorgonio Pass Near Banning.

PZ...Small Craft Advisory until 6 AM PST Tuesday for Coastal Waters from San Mateo Point to the Mexican Border and out to 30 nm-Waters from San Mateo point to the Mexican Border Extending 30 to 60 nm out including San Clemente Island.

&&

\$\$

PUBLIC...JAD/Albright  
AVIATION/MARINE...PG

# IOWA STATE UNIVERSITY

College of Ag  
Department of Agronomy

## Department of Agronomy

716 Farm House Ln  
Ames, IA 50011

akrherz@iastate.edu  
515-294-5978 phone



☐

613

FXUS65 KPSR 200415

AFDPSR

Area Forecast Discussion

National Weather Service Phoenix AZ

915 PM MST Mon Feb 19 2018

.UPDATE...

Updated Discussion and Aviation sections.

&&

.SYNOPSIS...

Unusually cool temperatures will prevail over the area Tuesday and Wednesday as a storm system exits the region. Winds will weaken during the evening and overnight hours as light precipitation exits Arizona toward morning. Colder than normal conditions will continue into the weekend before finally warming back to near average early next week.

&&

.DISCUSSION...

The leading edge of the frontal zone lies across eastern Gila County as of this writing. The back edge of the associated cloud band is over eastern portions of metro Phoenix. At the lower levels, dry advection is already underway with surface dew points in the single digits over much of our forecast area. Even under the cloud band the dew points are in the teens and 20s. Given how weak the echoes are and the dry subcloud air, anticipate no measurable precip on lower elevations but will hold onto PoPs for the rest of the evening over the higher terrain where there is orographic lift and the air isn't as dry. Only lingering slight chances in far eastern portions of the CWA overnight. Otherwise, with the main trough axis over the Mohave desert and some associated PVA, there may be some minor cloud redevelopment later tonight but no precip.

Winds over the forecast area have weakened quite a bit from this afternoon. Only remaining Wind Advisory is over the higher terrain east of Phoenix and that will be allowed to expire at 9 pm. Overnight lows will be much cooler than they were this morning with a lot of lower desert locations dipping into the 30s Tuesday morning including Phoenix suburbs. But lingering mixing will keep Min temps from bottoming out quite as much as they could. Tuesday

night/Wednesday morning still looks to be the coldest of the week. High temps Tuesday may be the coolest of the season.

&&

.PREVIOUS DISCUSSION...Issued 210 pm MST/110 pm PST...

A pronounced PV anomaly was driving down the Sierra chain and centered over southern Nevada this afternoon. An impressive 100kt H5 jet was rounding the basal portion of the trough axis translating the greatest height falls (10-18dm), cold advection aloft, and vorticity advection into northern Arizona. While veered boundary layer winds were scouring moisture from the forecast area into eastern Arizona and the best frontogenetical forcing aligned along the northern AZ CAA axis, favorable orographic flow continued north of Phoenix such that scattered low topped convective showers repeatedly have developed over ridge tops.

A steep low level frontal boundary can be seen in multiple satellite channels nearly bisecting the CWA this afternoon; and this front will continue to rapidly surge through the area, clearing into SE Arizona by this evening. Deep subsidence and incredibly dry air (single digit dewpoints) with veering winds will overspread the area, quickly cutting off available moisture and better orographic trajectories. In addition given the orientation of the overall trough axis and additional shortwave energy filling into the trough base this evening, the post frontal pressure gradient will weaken rather abruptly late this afternoon; and other than enhanced winds across ridge tops near the jet core, surface wind speeds will subside at lower elevations after sunset. However in the meantime, gusty winds will pick up some dust in the pre-frontal zone though recent rainfall may hold down a more expansive dust problem.

Colder and much drier air will have fully flooded our area Tuesday, and 850 mb temperatures only around 1-2 C will translate into highs only in the mid-50s! This is despite the fact skies will be crystal clear under late February sun. Believe it or not, this could match or exceed the coldest day so far this winter (which was 57 degrees on December 21st). Temperatures will plummet Tuesday night after sunset under clear skies and light winds. Based on historical trends following strong cold fronts, have hedged the forecast towards raw guidance resulting in widespread 30s by Wednesday morning in the lower deserts. In fact, the coldest lower elevation locations will likely drop into the upper 20s during this period.

The general long wave trough is forecast to stick around through at least Friday. However, the warm February sun will undoubtedly modify this airmass on both Wednesday and Thursday bringing a bit of warming each day. Yet another shortwave will rotate through this trough come Friday, which looks to be relatively cold in nature, but

will not be packing much in the way of moisture. PWs are forecast to be around 0.5 inches at best, but strong PVA forcing may accompany this trough if indeed it comes to fruition. Really, the main impact would be some breezy conditions along with some light snowfall above 4000 ft. However, there are still model disagreements with the ECMWF & GEFS offering a much drier solution than the GFS.

Quasi-zonal flow develops for the weekend and possibly into early next week bringing tranquil weather. This pattern would allow temperatures to gradually rise back to near normal while winds stay relatively light.

&&

.AVIATION...

South-Central Arizona including KPHX, KIWA, and KSDL:

A cold front has pushed into the east-central Arizona mountains. The back edge of the associated cloud band will clear metro Phoenix by 05Z. Mountain obscuration over Gila County and far NE Maricopa County will improve from west to east overnight. Some scattered mid clouds will linger overnight before clear skies take hold Tuesday. Anticipate lingering west and northwest surface winds overnight dipping below 10 kts by 07Z. Winds above the surface will slowly weaken tonight (most noticeably within the lowest 5kft) but will generally hold a west component overnight and through the day Tuesday. Anticipate lofted dust to continue slowly dissipating.

Southeast California/Southwest Arizona including KIPL and KBLH:

West and northwest winds will linger overnight and dip below 10 kts by 07Z (stronger over Imperial County). Isolated to scattered clouds AOA FL090 (locally BKN over higher terrain) will dissipate by 12Z. Winds in the lowest 10 kft will favor northwest and north directions overnight and through the day Tuesday. Anticipate lofted dust to continue slowly dissipating.

Aviation Discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Wednesday through Sunday:

A series of low pressure systems will move through the Desert Southwest through the weekend. This will help to reinforce the below normal temperatures across the region, while there will only be a slight chance of precipitation with the system Friday and



Friday night. Below normal RHs are also expected particularly Wednesday, though winds will remain below critical thresholds through the period. A warming trend is likely by Sunday, though temperature will remain below average.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...None.

&&

\$\$

Visit us on Facebook, Twitter, and at [weather.gov/phoenix](http://weather.gov/phoenix)

DISCUSSION...AJ

PREVIOUS DISCUSSION...MO/Wilson

AVIATION...AJ

FIRE WEATHER...Hirsch

# IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

## Department of Agronomy

716 Farm House Ln

Ames, IA 50011

[akrherz@iastate.edu](mailto:akrherz@iastate.edu)

515-294-5978 phone

┌  
372  
FXUS66 KSGX 200518  
AFDSGX

Area Forecast Discussion  
National Weather Service San Diego CA  
918 PM PST Mon Feb 19 2018

.SYNOPSIS...

Clearing skies and cold temperatures by Southern California standards will occur tonight. Freezing or near freezing temperatures will likely impact portions of the valleys and Inland Empire that don't regularly experience them. Drier and cooler on Tuesday with mostly sunny skies. The pattern will remain active into next week, resulting in several more chances for rain or mountains snow showers, and continued near to below average temperatures.

&&

.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE...  
SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO  
COUNTIES...

At 930 PM...The axis of the deep trough over the Western U.S. had pushed east of SoCal, resulting in northwest flow and subsidence that were bringing drier air clearing skies to the region. Winds were weakening rapidly at the surface, with stronger gusts limited to the desert slopes. Accordingly, temperatures were cooling quickly with some parts of the eastern San Diego County valleys and Inland Empire already seeing temperatures in the upper 30s and low 40s.

As we progress through the overnight hours, the mostly clear skies and a return to light and variable winds should induce strong radiational cooling. This will likely produce overnight lows in the upper 20s and low 30s over the Inland Empire and Eastern San Diego County Valleys, resulting in widespread frost. The current Frost and Freeze Advisories/Warning appear to be on track. Definitely a night for covering sensitive vegetation and bringing pets indoors if you live east of Interstate 15. Lows will be more mixed along the coast where the lower elevation should limit any patchy frost to the most sheltered areas. Not to be forgotten, it should be one of the coldest nights of the winter season in the upper deserts and mountains.

A dry but cool pattern will prevail on Tuesday, with northwest flow aloft and depressed 500 mb heights over the region. Afternoon highs should range from 5 degrees below average at the coast to 20 degrees below average in the mountains.

The continuation of a longwave trough over the Western U.S. through the remainder of this week and into early next week should

**February 19, 2018 Exceptional Event, Imperial County****Appendix A**

keep the pattern active, with near/below average temperatures. There is a slight chance of light precipitation Wednesday. However, the best chances for rain/mtn snow showers should be Friday and early next week with the GFS/ECMWF both advertising more vigorous shortwaves. Timing and availability of moisture remain in question with these systems given their more north-south trajectory.

&&

.AVIATION...

200445Z...Coast and Valleys...Scattered showers, mainly over San Diego County, will gradually taper off through 08Z. Otherwise, SCT-BKN cloud layers 3500-9000 ft MSL becoming FEW-SCT overnight. Mostly clear with unrestricted vis Tuesday morning through Tuesday evening.

Mountains and Deserts...SCT-BKN clouds 3500-9000 ft MSL will locally obscure coastal mountain slopes through about 12Z. Otherwise clear with unrestricted vis through Tuesday evening.

&&

.MARINE...

Northwest winds with gusts 25 to 30 kts and seas near 10 ft with a 8-9 sec period will continue through Tuesday morning. No hazardous marine conditions are expected Tuesday afternoon and Wednesday, but hazardous winds and seas are likely again Thursday afternoon through Friday.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...Freeze Warning until 9 AM PST Tuesday for San Bernardino and Riverside County Valleys-The Inland Empire.

Frost Advisory until 9 AM PST Tuesday for San Diego County Valleys-San Geronio Pass Near Banning.

Frost Advisory from 10 PM Tuesday to 8 AM PST Wednesday for San Bernardino and Riverside County Valleys-The Inland Empire.

PZ...Small Craft Advisory until 6 AM PST Tuesday for Coastal Waters from San Mateo Point to the Mexican Border and out to 30 nm-Waters from San Mateo point to the Mexican Border Extending 30 to 60 nm out including San Clemente Island.

&&

\$\$

PUBLIC...Albright  
AVIATION/MARINE...SS

**See second page for wind information**

☐

708

WWUS76 KSGX 200557

NPWSGX

URGENT - WEATHER MESSAGE

National Weather Service San Diego CA

957 PM PST Mon Feb 19 2018

...NEAR FREEZING TEMPERATURES IN THE VALLEYS WITH AREAS OF FROST  
TONIGHT AND TUESDAY NIGHT...

.Clear skies and light winds will result in cold conditions for  
inland areas through daybreak Tuesday.

CAZ065-201400-

/O.CAN.KSGX.WI.Y.0006.000000T0000Z-180220T0600Z/

/O.CON.KSGX.FR.Y.0002.180220T0600Z-180220T1700Z/

San Geronio Pass Near Banning-

Including the cities of Banning and Desert Hot Springs

957 PM PST Mon Feb 19 2018

...FROST ADVISORY REMAINS IN EFFECT UNTIL 9 AM PST TUESDAY...

...WIND ADVISORY IS CANCELLED...

The National Weather Service in San Diego has cancelled the Wind  
Advisory.

\* Temperatures...Falling into the lower to mid 30s late tonight  
into Tuesday morning with areas of frost possible.

\* Duration...Several hours with temperatures sufficient for  
frost late tonight into Tuesday morning.

\* Impacts...Strong winds will make travel difficult for high-  
profile vehicles. Sensitive outdoor plants may be killed if left  
uncovered.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Frost Advisory means that widespread frost is expected.  
Sensitive outdoor plants may be killed if left uncovered.

&amp;&amp;

\$\$

CAZ061-062-200700-

/O.CAN.KSGX.WI.Y.0006.000000T0000Z-180220T0600Z/  
Coachella Valley-San Diego County Deserts-  
957 PM PST Mon Feb 19 2018

...WIND ADVISORY IS CANCELLED...

The National Weather Service in San Diego has cancelled the Wind Advisory.

Winds have weakened in the area and are expected to remain on a weakening trend overnight.

\$\$

CAZ048-201400-

/O.CON.KSGX.FZ.W.0001.180220T0600Z-180220T1700Z/

/O.CON.KSGX.FR.Y.0003.180221T0600Z-180221T1600Z/

San Bernardino and Riverside County Valleys-The Inland Empire-  
Including the cities of Riverside, San Bernardino, Ontario,  
Moreno Valley, Fontana, Rancho Cucamonga, and Corona  
957 PM PST Mon Feb 19 2018

...FREEZE WARNING REMAINS IN EFFECT UNTIL 9 AM PST TUESDAY...

...FROST ADVISORY REMAINS IN EFFECT FROM 10 PM TUESDAY TO 8 AM  
PST WEDNESDAY...

\* Temperature...Falling into the upper 20s to mid 30s tonight  
into Tuesday morning...and into the 30s tonight into Wednesday  
morning.

\* Duration...Several hours of temperatures sufficient for frost  
each night with 4 to 6 hours of near or below freezing  
conditions.

\* Location...Coldest in low-lying, wind-sheltered areas...  
especially in southern and eastern portions of the Inland  
Empire.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Freeze Warning means sub-freezing temperatures are imminent or  
highly likely. These conditions will kill crops and other  
sensitive vegetation.

A Frost Advisory means that widespread frost is expected.  
Sensitive outdoor plants may be killed if left uncovered.

&&

\$\$

CAZ050-201400-

/O.CON.KSGX.FR.Y.0002.180220T0600Z-180220T1700Z/

San Diego County Valleys-

Including the cities of Escondido, San Marcos, and Poway

957 PM PST Mon Feb 19 2018

...FROST ADVISORY REMAINS IN EFFECT UNTIL 9 AM PST TUESDAY...

\* Temperatures...Falling into the lower to mid 30s late tonight into Tuesday morning, with areas of frost possible. Coldest areas in the inland valleys near the foothills of the mountains.

\* Impacts...Sensitive outdoor plants may be killed if left uncovered.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Frost Advisory means that widespread frost is expected. Sensitive outdoor plants may be killed if left uncovered.

&&

\$\$

Albright

# IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

## Department of Agronomy

716 Farm House Ln

Ames, IA 50011

[akrherz@iastate.edu](mailto:akrherz@iastate.edu)

515-294-5978 phone

「  
349  
FXUS66 KSGX 201040  
AFDSGX

Area Forecast Discussion  
National Weather Service San Diego CA  
240 AM PST Tue Feb 20 2018

.SYNOPSIS...

A cold north flow pattern will continue this week with additional chances for mostly light showers with lower snow levels around Wednesday into Wednesday night...and again around late Thursday into early Friday. Dry and a little warmer for next weekend. For the early to middle part of next week...a trough of low pressure near the West Coast will bring increasing chances for potentially more significant precipitation.

&&

.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE...  
SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO  
COUNTIES...

A longwave trough of low pressure will remain centered over the western states with shortwaves moving quickly southward along the western side of the trough near the West Coast. Relatively slight differences in the track...timing...and intensity of these systems will have noticeable impacts on the weather that is ultimately experienced across Southern California. Tracks slightly farther west would keep most of the precipitation off the coast while tracks a little farther east would have greater potential to spread precipitation inland to around the mountains. In any event...precipitation amounts should be mostly light with coverage fairly limited. Snow levels will continue to be fairly low... around 3500 feet. One of these shortwaves could bring some additional mostly light precipitation around Wednesday into Wednesday night and another around late Thursday into early Friday.

In the near term...temperatures in the inland valleys have fallen into the lower to mid 30s early this morning with the coldest locations in the mid to upper 20s with temperatures in the upper deserts mostly in the mid to upper 20s. Ramona has fallen to at least as low as 24 so far which would be a new record low temperature for the date. The previous record low temperature for today for Ramona was 26 in 2006. Temperatures tonight will be not quite as cold with the areas impacted by frost and freeze conditions a little smaller.

Dry with a slow warming trend for the weekend...but with high temperatures remaining below average as the trough of low pressure over the southwest states weakens.

**February 19, 2018 Exceptional Event, Imperial County****Appendix A**

For the early to middle part of next week...a trough of low pressure will redevelop a little farther to the west in the vicinity of the West Coast with continuing more significant differences among the global models with the details. This will maintain below average temperatures with increasing possibilities for potentially more significant precipitation for Southern California.

&&

.AVIATION...

201000Z...Mostly clear skies and VFR conditions today through tonight.

&&

.MARINE...

Northwest winds and choppy seas will continue to diminish this morning. No hazardous marine conditions are expected through early Thursday, but hazardous winds and seas are likely again Thursday afternoon through Friday.

&&

.SKYWARN...

Skywarn activation is not requested. However weather spotters are encouraged to report significant weather conditions.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...Frost Advisory from 10 PM this evening to 8 AM PST Wednesday for San Bernardino and Riverside County Valleys-The Inland Empire-San Diego County Valleys.

Freeze Warning until 9 AM PST this morning for San Bernardino and Riverside County Valleys-The Inland Empire.

Frost Advisory until 9 AM PST this morning for San Diego County Valleys-San Geronimo Pass Near Banning.

PZ...Small Craft Advisory until 6 AM PST early this morning for Coastal Waters from San Mateo Point to the Mexican Border and out to 30 nm-Waters from San Mateo point to the Mexican Border Extending 30 to 60 nm out including San Clemente Island.

&&

\$\$

PUBLIC...17

AVIATION/MARINE...MM



☐

457

FXUS65 KPSR 201025

AFDPSR

Area Forecast Discussion

National Weather Service Phoenix AZ

325 AM MST Tue Feb 20 2018

.SYNOPSIS...

Today will feature some of the coldest air of the winter, with freezing temperatures possible in some areas Wednesday morning. A gradual warming trend is expected through early next week, though temperatures will remain below average.

&&

.DISCUSSION...

Latest water vapor imagery and streamline analysis suggest that the broad trough axis to our west has slowed. Consequently, mid clouds continue to stream northeastward ahead of the trough from Maricopa County eastward. Embedded within these clouds are scattered light rain and snow showers across the higher terrain, though little to no accumulation is expected, even across the highest peaks. Meanwhile, further west across central Arizona, dry air continues to scour out the residual moisture, with surface dewpoints as low as the lower teens.

Models remain in good agreement and indicate the aforementioned trough will weaken as it lifts to the northeast today. However, in its wake, an anomalously cold air mass will settle across the Desert Southwest. Latest NAEFS indicates 700 mb temperatures will fall below the 5th percentile (relative to climatology). Despite the sunny skies, a high temperature of only 58 degrees in Phoenix is expected, which would be the coolest day since December 21st (57 degrees). A reinforcing shot of dry air will also overspread the forecast area, with dewpoints falling into the single digits this afternoon. The dry air combined with the light winds and clear skies will provide a favorable setup for efficient radiational cooling tonight. It is likely that some spots in the outlying Phoenix suburbs will observe a few hours of freezing temperatures early Wednesday morning, though coverage will not necessitate a Freeze Warning.

Longwave trough across the western CONUS will persist into the weekend, resulting in a continuation of the below normal temperatures. GFS/ECMWF are in good agreement that a series of short-wave troughs will move through the region over the next

several days. The strongest of these systems is likely to impact Arizona Friday. While some GEFS and ECMWF ENS members indicate that light precipitation will reach as far south as Phoenix, the general consensus is that precipitation will remain confined to northern Arizona. Behind this system, gradual height rises will yield a discernible warming trend into early next week.

&&

.AVIATION...

South-Central Arizona including KPHX, KIWA, and KSDL:

A cold front has pushed into the east-central Arizona mountains. The back edge of the associated cloud band will clear metro Phoenix by 05Z. Mountain obscuration over Gila County and far NE Maricopa County will improve from west to east overnight. Some scattered mid clouds will linger overnight before clear skies take hold Tuesday. Anticipate lingering west and northwest surface winds overnight dipping below 10 kts by 07Z. Winds above the surface will slowly weaken tonight (most noticeably within the lowest 5kft) but will generally hold a west component overnight and through the day Tuesday. Anticipate lofted dust to continue slowly dissipating.

Southeast California/Southwest Arizona including KIPL and KBLH:

West and northwest winds will linger overnight and dip below 10 kts by 07Z (stronger over Imperial County). Isolated to scattered clouds AOA FL090 (locally BKN over higher terrain) will dissipate by 12Z. Winds in the lowest 10 kft will favor northwest and north directions overnight and through the day Tuesday. Anticipate lofted dust to continue slowly dissipating.

Aviation Discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Wednesday through Sunday:

A series of low pressure systems will move through the Desert Southwest through the weekend. This will help to reinforce the below normal temperatures across the region, while there will only be a slight chance of precipitation with the system Friday and Friday night. Below normal RHs are also expected particularly Wednesday, though winds will remain below critical thresholds through the period. A warming trend is likely by Sunday, though temperature will remain below average.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...None.

&&

\$\$

Visit us on Facebook, Twitter, and at [weather.gov/phoenix](http://weather.gov/phoenix)

DISCUSSION...Hirsch

AVIATION..AJ

FIRE WEATHER...Hirsch

# IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

## Department of Agronomy

716 Farm House Ln

Ames, IA 50011

[akrherz@iastate.edu](mailto:akrherz@iastate.edu)

515-294-5978 phone



Facebook



Twitter



Github



YouTube